# भूगोल
# Geography

## कक्षा / Class XII

2026-27

विद्यार्थी सहायक सामग्री
Student Support Material



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# संदेश

शिक्षा केवल पुस्तकों तक सीमित ज्ञान नहीं है; यह स्वयं को पहचानने, अपने विचारों को विस्तार देने और जीवन की चुनौतियों का आत्मविश्वास से सामना करने की सतत् यात्रा है। केन्द्रीय विद्यालय संगठन का सदैव यह प्रयास रहा है कि प्रत्येक विद्यार्थी के लिए ऐसा शिक्षण वातावरण हो, जहाँ जिज्ञासा को प्रोत्साहन मिले, सीखना आनंददायी बने और प्रत्येक बालक अपनी अंतर्निहित क्षमताओं को पहचानकर उन्हें विकसित कर सके।

राष्ट्रीय शिक्षा नीति 2020 ने शिक्षा को सिर्फ रटने से समझने, सूचना से ज्ञान और ज्ञान से जीवनोपयोगी दक्षताओं की ओर अग्रसर किया है। आज का समय कृत्रिम बुद्धिमत्ता (Artificial Intelligence – AI), डिजिटल नवाचार और निरंतर बदलती तकनीकों का है। ऐसे युग में केवल तथ्यों का ज्ञान पर्याप्त नहीं है; आवश्यक है कि विद्यार्थी मनन- चिंतन करना सीखें, प्रश्न पूछें, समस्याओं का समाधान खोजें और नए विचारों के साथ आगे बढ़ें। यही क्षमताएँ उन्हें भविष्य के लिए तैयार करेंगी।

इन्हीं उद्देश्यों को ध्यान में रखते हुए केन्द्रीय विद्यालय संगठन के पाँचों आंचलिक शिक्षा एवं प्रशिक्षण संस्थानों (ZIETs) के माध्यम से, समर्पित एवं अनुभवी शिक्षकों द्वारा कक्षा 9 से 12 के विद्यार्थियों के लिए यह विद्यार्थी सहायक सामग्री तैयार की गई है। यह केवल परीक्षा की तैयारी की संकलन सामग्री नहीं है, बल्कि विषयों को सरलता से समझने, अवधारणाओं को स्पष्ट करने, नियमित अभ्यास करने और आत्मविश्वास के साथ आगे बढ़ने का एक विश्वसनीय साथी है।

इस सामग्री में विषय-वस्तु को विद्यार्थियों की आवश्यकताओं के अनुरूप सरल, व्यवस्थित एवं दक्षता-आधारित दृष्टिकोण से प्रस्तुत किया गया है। मुझे प्रसन्नता है कि इसे हमारे शिक्षकों के अनुभव, नवाचार और विद्यार्थियों के प्रति उनकी प्रतिबद्धता ने समृद्ध बनाया है। मुझे विश्वास है कि यह सामग्री विद्यार्थियों की सीखने की यात्रा को अधिक सहज, रोचक और प्रभावी बनाएगी तथा उन्हें बोर्ड परीक्षाओं के साथ-साथ जीवन की व्यापक चुनौतियों के लिए भी तैयार करेगी।

मेरा विश्वास है कि जब एक जिज्ञासु विद्यार्थी, प्रेरित शिक्षक और सार्थक शिक्षण संसाधन एक साथ आते हैं, तब शिक्षा केवल उपलब्धि का माध्यम नहीं रहती, बल्कि व्यक्तित्व निर्माण की एक सशक्त प्रक्रिया बन जाती है। यही भावना इस विद्यार्थी सहायक सामग्री के केंद्र में है।

मेरी हार्दिक शुभकामनाएँ हैं कि आप सभी सीखने की इस यात्रा में निरंतर आगे बढ़ें, अपने सपनों को नए आयाम दें और ज्ञान, संवेदनशीलता तथा नवाचार के साथ राष्ट्र निर्माण में अपना महत्वपूर्ण योगदान दें।

शुभकामनाओं सहित।

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**CLASS XII**
**COURSE STRUCTURE**
**BOOK- FUNDAMENTAL OF HUMAN GEOGRAPHY**

| Chapter No. | Chapter Name | Weightage |
|---|---|---|
| | **Unit I** | |
| 1 | Human Geography | 3 |
| | **Unit II** | |
| 2 | The World Population Density Distribution and Growth | 8 |
| 3 | Human Development | |
| | **Unit III** | |
| 4 | Primary Activities | 19 |
| 5 | Secondary Activities | |
| 6 | Tertiary and Quaternary Activities | |
| 7 | Transport and Communication | |
| 8 | International Trade | |
| Map Work (Based on identification of features on World Political Map) | | 5 |
| | **Total** | **35** |

**BOOK- INDIA PEOPLE AND ECONOMY**

| Chapter No. | Chapter Name | Weightage |
|---|---|---|
| | **Unit I** | |
| 1 | Population Distribution Density Growth and Composition | 5 |
| | **Unit II** | |
| 2 | Human Settlements | 3 |
| | **Unit III** | |
| 3 | Land Resources and Agriculture | 10 |
| 4 | Water Resources | |
| 5 | Mineral and Energy Resources | |
| 6 | Planning and Sustainable Development in Indian Context | |
| | **Unit IV** | |
| 7 | Transport and Communication | 7 |
| 8 | International Trade | |
| | **Unit V** | |
| 9 | Geographical Perspective on selected issues and problems | 5 |
| Map Work (Based on locating and labelling on a political map of India) | | 5 |
| Total | | **35** |

**FUNDAMENTALS OF HUMAN GEOGRAPHY**
**(Map work)**

| Chapter No. and Name | Map Items |
|---|---|
| 1. Human Geography | Nil |
| 2. The World Population Density Distribution and Growth | Nil |
| 3. Human Development | Nil |
| 4. Primary Activities | 1. Areas of subsistence gathering<br>2. Major areas of nomadic herding of the world<br>3. Major areas of commercial livestock rearing<br>4. Major areas of extensive commercial grain farming<br>5. Major areas of mixed farming of the World |
| 5. Secondary Activities | Nil |
| 6. Tertiary and Quaternary Activities | Nil |
| 7. Transport and Communication | <u>Terminal Stations of Transcontinental Railways-</u><br>Trans-Siberian, Trans Canadian, Trans-Australian Railways<br><br><u>Major Sea Ports-</u><br>Europe: North Cape, London, Hamburg<br>North America: Vancouver, San Francisco, New Orleans<br>South America: Rio De Janeiro, Colon, Valparaiso<br>Africa: Suez and Cape Town<br>Asia: Yokohama, Shanghai, Hong Kong, Aden, Karachi, Kolkata<br>Australia: Perth, Sydney, Melbourne<br><br><u>Major Airports-</u><br>Asia: Tokyo, Beijing, Mumbai, Jeddah, Aden<br>Africa: Johannesburg & Nairobi<br>Europe: Moscow, London, Paris, Berlin and Rome<br>North America: Chicago, New Orleans, Mexico City<br>South America: Buenos Aires, Santiago<br>Australia: Darwin and Wellington<br><br><u>Inland Waterways-</u><br>Suez Canal, Panama Canal, Rhine waterways and St. Lawrence Seaways |
| 8. International Trade | Nil |

Book: India People and Economy
(Map work)

| Chapter No. and Name | Map Items |
|---|---|
| 1. Population Distribution Density Growth and Composition | State with highest population density & state with lowest population density (2011) |
| 2. Human Settlement | Nil |
| 3. Land Resources and Agriculture | Leading producing states of the following crops:<br>(a) Rice (b) Wheat (c) Cotton (d) Jute (e) Sugarcane (f) Tea (g) Coffee |
| 4. Water Resources | Nil |
| 5. Mineral And Energy Resources | Mines:<br>Iron-ore mines: Mayurbhanj, Bailadila, Ratnagiri, Bellary<br>Manganese mines: Balaghat, Shimoga<br>Copper mines: Hazaribagh, Singhbhum, Khetari<br>Bauxite mines: Katni, Bilaspur and Koraput<br>Coal mines: Jharia, Bokaro, Raniganj, Neyveli<br>Oil Refineries: Mathura, Jamnagar, Barauni |
| 6. Planning and Sustainable Development in Indian Context | Nil |
| 7. Transport and Communication | Nil |
| 8. International Trade | Major Sea Ports: Kandla, Mumbai, Marmagao, Kochi, Mangalore, Tuticorin, Chennai, Vishakhapatnam, Paradwip, Haldia<br><br>International Airports: Ahmedabad, Mumbai, Bengaluru, Chennai, Kolkata, Guwahati, Delhi, Amritsar, Thiruvananthapuram & Hyderabad. |
| 9. Geographical Perspective on selected issues and problems | Nil |

**BOOK- FUNDAMENTALS OF HUMAN GEOGRAPHY**

**CHAPTER-01: HUMAN GEOGRAPHY NATURE AND SCOPE (Weightage 3 Marks)**

## CHAPTER SUMMARY

Human Geography is the study of the **relationship between humans and nature**.

It explains:
How nature affects human life
How humans change nature using technology.
How humans and the environment depend on each other.
EARTH

- Natural Environment (Land • Water • Climate • Forest)
- Cultural Environment (Villages • Cities • Roads • Industries)

## Important Definitions of Human Geography by Scholars

**1. Ratzel :-**"Human geography is the synthetic study of relationship between human societies and earth's surface".
**2. Ellen Semple :-** "Human geography is the study of the changing relationship between the unresting man and the unstable earth."
**3. Vidal de la Blache :-** "Conception resulting from a more synthetic knowledge of the physical laws governing our earth and of the relations between the living beings which inhabit it".

| S.No. | Basis of Comparison | Environmental Determinism | Possibilism | Neo-Determinism |
|---|---|---|---|---|
| 1 | Core Power Dynamic | Nature is the supreme power; it dictates human actions. | Humans hold the power; they can alter and mold the environment. | Neither is entirely supreme; it is a relationship of mutual interaction. |
| 2 | Master/Slave Relationship | Humans are passive agents or "slaves" to nature. | Humans are dominant (omnipotent), actively conquering natural limits. | Humans and nature act as equal partners, cooperating to shape the geography of an area. |
| 3 | Key Proponents | Ellen Churchill Semple, Friedrich Ratzel | Paul Vidal de la Blache | Griffith Taylor |
| 4 | Freedom vs. Necessity | A state of absolute necessity; humans must completely adapt to nature's constraints. | A state of absolute freedom; humans have endless possibilities to command nature. | Neither a situation of absolute necessity nor absolute freedom; freedom is possible only within natural limits. |
| 5 | Alternative Names / Concepts | Naturalization of Humans | Humanization of Nature | Stop-and-Go Determinism / Madhyam Marg / Traffic Light concept. |

** Development should happen without harming nature, utilize resources judiciously in sustainable manner.

## GEOGRAPHY THROUGH DIFFERENT CORRIDORS OF TIME

Understanding how Human Geography developed over time is very important for exams.

| Period | Approach | Main Focus |
|---|---|---|
| Early Colonial Period | Exploration & Description | Discovery of new areas and trade routes |
| Later Colonial Period | Regional Analysis | Detailed study of regions |
| 1930s (Inter-War Period) | Areal Differentiation | Understanding how regions are different |
| Late 1950s–1960s | Spatial Organisation | Use of statistics and maps (Quantitative Revolution) |
| 1970s | Humanistic, Radical & Behavioural Schools | Human welfare, inequality and behaviour |
| 1990s | Post-modernism | Every place is unique |

## MCQ

1. Technology loosens the shackles of the environment on human beings. Statement supports to
A. Determinism
B. Possibilism
C. Neo-Determinism
D. None of these

2. Paradigm shift from Environmentalism to Possibilism was due to
A. Global warming
B. Globalisation
C. Technological Development
D. Change in environment

## SHORT ANSWER QUESTIONS

**Q 1. Describe the approaches of human geography in 1970. There are three schools of thought in human geography?**

**a) Welfare or humanistic school-** This was mainly concerned with the different aspects of social well-being of the people.

**b) Radical**- This was based on Marxian theory to explain the basic cause of poverty, deprivation and social inequality

**c) Behavioural**-This focused on living experience and also on the view about places.

**Q 2. "Nature and human are inseparable elements in all geographical studies." Examine the statement.**

- Geography does not recognize a valid dualism between nature and humans because the physical environment and human activities constantly react with and shape one another.
- Nature provides the physical framework (landforms, climate, and soil), which acts as the resource base. Humans interact with this physical environment through technology, which reflects their level of cultural development.
- Geographers describe this deeply intertwined relationship using organic metaphors:
- **Physical features** are described using human anatomy (e.g., *face* of the earth, *eye* of a storm, *mouth* of a river, and *snout* of a glacier).
- **Human-made features** are described using biological terms (e.g., regions, villages, and towns are studied as *living organisms*, and roads or railways act as *arteries of circulation*).

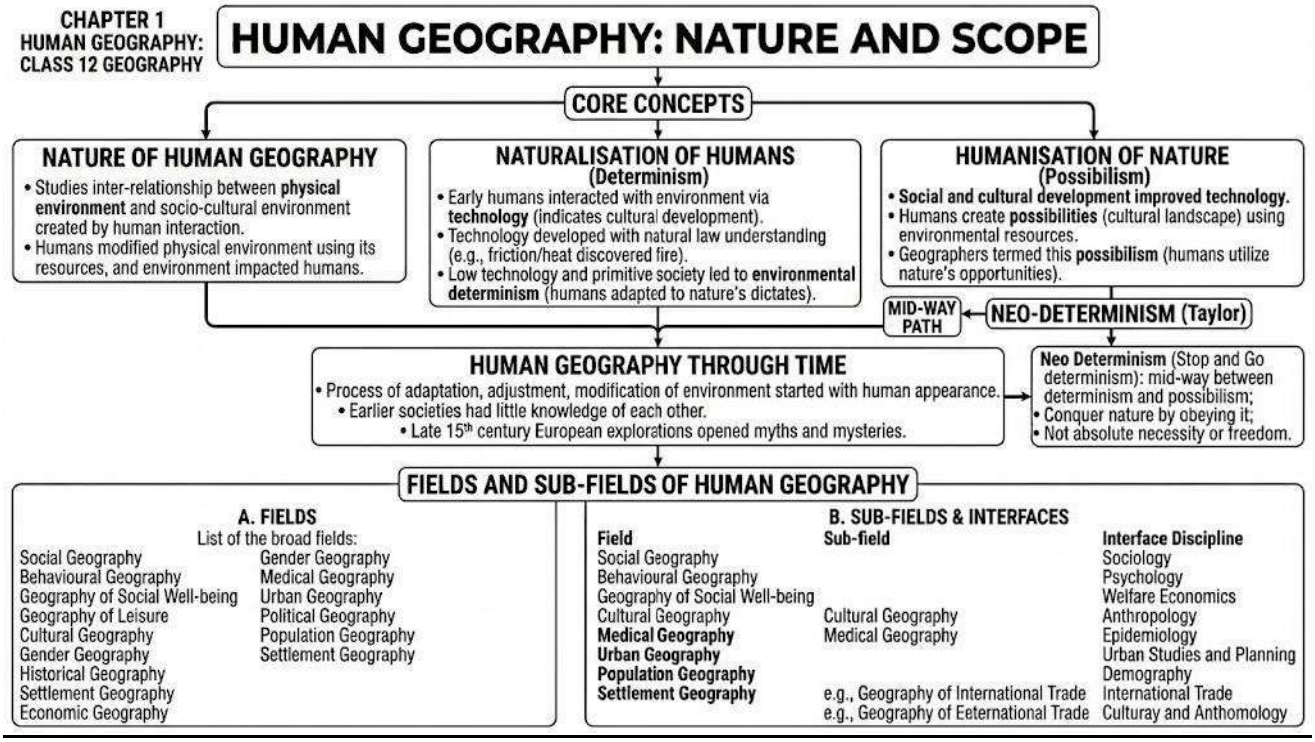
Because human survival is impossible without natural resources, and the physical earth is continuously modified by human presence, the two remain functionally inseparable in geographical studies.

**Q 3 "The knowledge of nature is extremely important to develop technology." Support the statement by giving three examples.**

It is important to know with the help of what tools and techniques do humans produce and create. Technology indicates the level of educational development of society. Human beings were able to develop technology after they developed better understanding of natural laws.

- The understanding of concepts of friction and heat helped us discover fire.
- Understanding of the secrets of DNA and genetics enabled us to conquer many diseases.
- The laws of aerodynamics are used to develop faster planes.
- Knowledge about nature is extremely important to develop technology. Technology loosens the shackles of environment on human beings.

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MCQ ANS 1) B 2) C

## CHAPTER-2: THE WORLD POPULATION DISTRIBUTION, DENSITY, AND GROWTH

**Weightage of Unit II (Chapter 2 & 3)= 8 Marks**

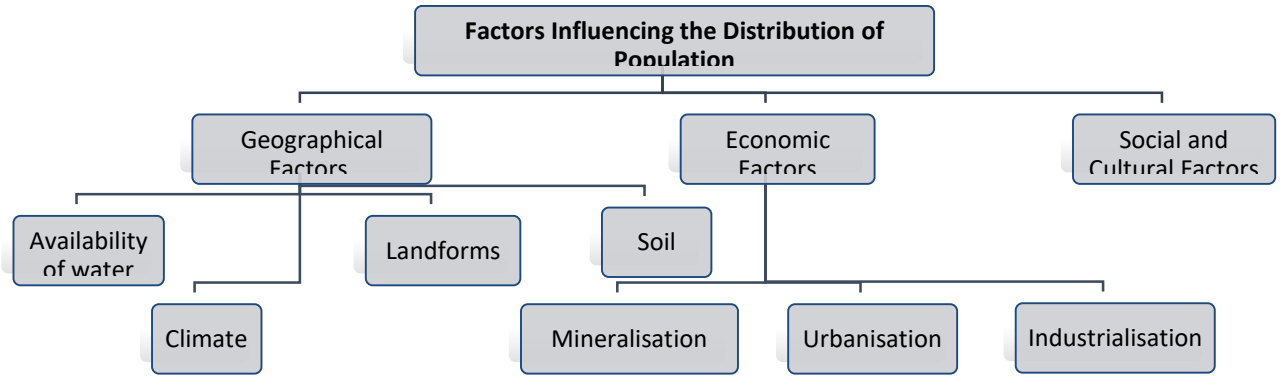
## CHAPTER SUMMARY

**Patterns of Population Distribution in the World-**

- The term population distribution refers to the way people are spaced over the earth's surface.
- "Asia has many places where people are few and few place where people are very many" – George B Cressey
- Broadly, 90% of the world population lives in about 10 % of its land area.
- The 10 most populous countries of the world contribute about 60 % of the world's population.
- Out of 10 Countries, 6 are located in Asia.

**Density of Population-**

**Population Density = Population / Area**




## SOME BASIC CONCEPTS OF POPULATION GEOGRAPHY

- **Growth of Population:** The change of population in a particular area between two points of time is known as the growth of population.
- **Growth Rate of Population:** This is the change of population expressed in percentage.
- **Natural Growth of Population:**

Natural Growth = Births – Deaths

Actual Growth of Population: = Births – Deaths + In Migration – Out Migration

*Positive Growth of Population* = birth rate > death rate

**Components of Population Change-** There are three components of population change –

I) Births II)Deaths III)Migration.

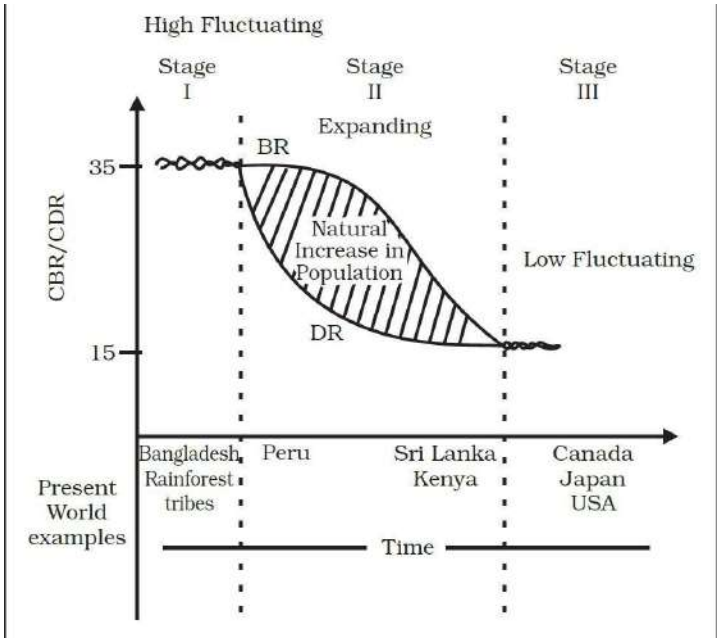
| Crude Birth Rate **(CBR)** | Crude Death Rate **(CDR)** |
|---|---|
| CBR = Bi/P × 1000 | CDR = D/P × 1000 |

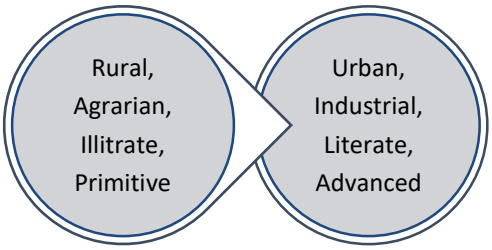
| | |
|---|---|
| Here, CBR = Crude Birth Rate; Bi = live births during the year; P = mid-year population of the area. | Here, CDR=Crude Death Rate; D= Number of deaths; P=Estimated mid-year population of the year. |

| **Push Factors** | **Pull Factors** |
|---|---|
| These factors operate at the place of origin and compel people to leave because the place seems less attractive. | These factors operate at the place of destination and attract people from other areas because the place seems more appealing. |
| • Unemployment<br>• Poor living conditions | • Better job opportunities<br>• Better living conditions |
| • Unpleasant climate<br>• Natural disasters / Epidemics | • Pleasant climate |
| • Political turmoil<br>• Socio-economic backwardness | • Peace and Stability<br>• Security of Life and Property |

**Demographic Transition-**

| | |
|---|---|
| **The First stage** has high fertility and high mortality because people reproduce more to compensate for the deaths due to epidemics and variable food supply. Two hundred years ago all the countries of the world were in this stage. | **BR ↑↑ DR ↑↑ = GROWTH (Stable)** |
| **The Second stage** Fertility remains high but it declines with time. Improvements in sanitation and health conditions lead to a decline in mortality. Because of this gap the net addition to population is high. | **BR ↑↑ DR ↑↓ = GROWTH ↑↑ (Population Explosion)** |
| **The Third stage**, both fertility and mortality decline considerably. The population is either stable or grows slowly. | **BR ↓↓ DR ↓↓ = GROWTH (Stable)** |




**MCQ**

**1. Which one of the following continents has the highest population density?**

A. Asia
B. Africa
C. Europe
D. North America

**2. Which of the following factors is not a determinant of population distribution?**

A. Climate
B. Soil fertility
C. Political stability
D. Ocean currents

## SHORT ANSWER QUESTIONS (3 MARKS)

**Q1. "90 per cent of the world population lives in about 10 per cent of its total land area, whereas the remaining 10 per cent population resides in the 90 per cent of its land area". Support the statement with suitable examples.**

**Ans:** It is true that 90 per cent of the world population lives in about 10 per cent of its total land area, whereas remaining 10 per cent population resides in the 90 per cent of its land area. The factor which affects the distribution of the population in the world are: Cultural Factors, Physical Factors, Means of Transport, and Economic Condition.

**Q2. What is the meaning of density of population? Examine the four geographical factors that influence the distribution of the population in the world with suitable examples.**

**Answer:** Population density refers to the ratio between the total population and the total land area in a country.Distribution. Geographical factors that influence the distribution of the population in the world are Relief, Plains, Climate, and Soil.

**Q3. "Preventive checks are better than the physical checks". Justify the statement in context of control of rapid population growth with suitable example.**

Thomas Malthus stated that the human population grows at a geometric rate while food production increases at an arithmetic rate. When population growth outpaces the available food supply, a correction becomes inevitable. Malthus outlined two ways this correction happens, demonstrating that preventive checks are far superior and more humane than physical checks due to the following reasons:

- Preventive checks are proactive, human-made measures adopted voluntarily to reduce birth rates before a crisis occurs. Conversely, physical checks are nature's reactive, forceful interventions that ruthlessly decrease population numbers by increasing mortality rates.
- Physical checks inflict immense trauma, widespread devastation, and agonizing pain on society through loss of life. Preventive checks, however, regulate population growth smoothly and peacefully, completely avoiding human casualties and preserving social stability.

## LONG ANSWER QUESTIONS (5 MARKS)

**Q1. Why do people prefer to live in certain regions and not in others?**

**I. Geographical Factors**

Availability of Water: People settle where fresh water is easily accessible for survival and agriculture. River valleys are the most densely populated areas globally.

Landforms: Flat plains and gentle slopes are preferred over rugged mountains for farming, housing, and building transport networks. Ganga plains are densely populated, while the Himalayas are sparsely populated.

Climate: Moderate climates with low seasonal variation attract population, while extreme heat, cold, or heavy rainfall repel it. Mediterranean regions are populated due to pleasant climate; polar zones are empty.

Soil: Areas with deep, fertile soils support intensive agriculture. Alluvial soil regions support high population densities due to farming.

**II. Economic Factors**

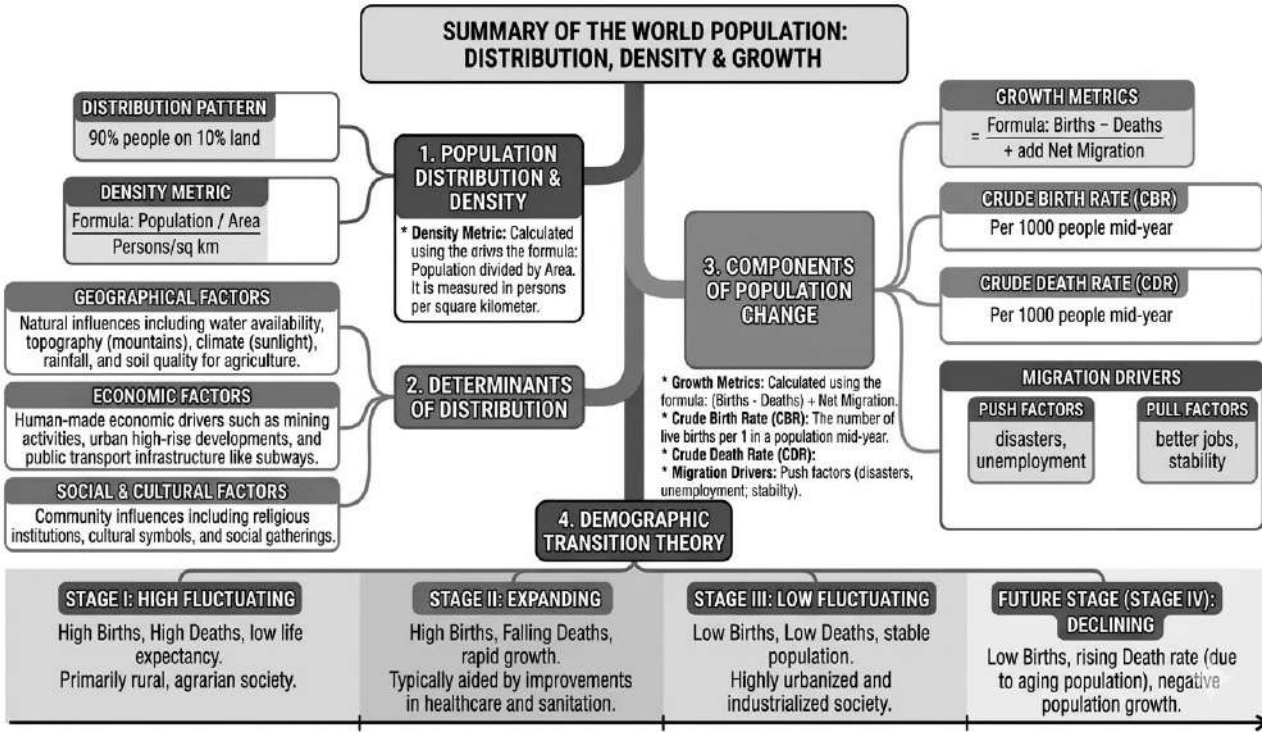
Minerals: Mineral-rich areas attract mining and industrial units, generating immense employment. Katanga-Zambia copper belt in Africa.

Urbanisation: Cities pull people from rural areas by offering better jobs, education, medical facilities, and civic amenities. Mega-cities like Mumbai or Tokyo.

Industrialisation: Industrial belts provide a wide range of job opportunities for workers, shopkeepers, and professionals alike. Kobe-Osaka region in Japan.

**III. Social and Cultural Factors-**

Some areas of the world are densely or thickly populated due to their social,religious and cultural significance . Ajmer, Makka Madina etc.




MCQ
ANS 1) A

2) D

# CHAPTER-3: HUMAN DEVELOPMENT

## CHAPTER SUMMARY

### Growth and Development-

| Growth | Development |
|---|---|
| 1. Growth is quantitative | 1.Development is qualitative |
| 2. Growth is value neutral | 2. Development is always value positive |
| 3.Growth may be either positive or negative. | 3. Development is a positive change in quality. |

- Pakistani economist **Dr Mahbub-ul-Haq** created the Human Development Index in **1990**. According to him, development is all about enlarging people's choices in order to lead long, healthy lives with dignity.
- The United Nations Development Programme has used his concept of human development to publish the Human Development Report annually since 1990.
- Nobel Laureate **Prof Amartya Sen** saw an increase in freedom. Dr. Mahbub-ul-Haq and Prof. Amartya Sen: architect of human development index.

## Four pillars of Human Development:

i) Equity ii) Sustainability iii) Productivity iv) Empowerment.

- **Equity** refers to equal access to opportunities available to everybody. The opportunities available to people must be equal irrespective of their gender, race, income and, in the Indian case, caste.
- **Sustainability** means continuity in the availability of opportunities. To have sustainable human development, each generation must have the same opportunities.
- **Productivity** here means human labour productivity or productivity in terms of human work. Such productivity must be constantly enriched by building capabilities in people. Ultimately, it is people who are the real wealth of nations.
- **Empowerment** means to have the power to make choices. Such power comes from increasing freedom and capacity.

### Approaches to Human Development:

| Approach | Core Idea | How it Works |
|---|---|---|
| Income Approach | One of the **oldest** viewpoints. It links human development directly to a person's income. | **Higher income** is believed to reflect a higher level of personal freedom and development. |
| Welfare Approach | Looks at human beings as passive targets or beneficiaries of **government programs.** | The government takes full responsibility for development by **maximizing public expenditure** on health, education, and social safety nets. |
| Basic Needs Approach | Initially proposed by the **International Labour Organisation (ILO).** | It identifies six basic needs: Health, Education, **Food, Water Supply, Sanitation, and Housing**. It focuses on providing these essentials rather than human choices. |

| | | |
|---|---|---|
| Capability Approach | Associated closely with **Prof. Amartya Sen.** | Focuses on actively building human capabilities in **health, education, and resource access**. Increasing capabilities directly expands human choices. |

## Indicators of Human Development Index-

1. **Areas of Health-** The indicator chosen to assess health is the **life expectancy at birth**. A higher life expectancy means that people have a greater chance of living longer and healthier lives.
2. **Areas of Education-** The adult literacy rate and the gross enrolment ratio represent access to knowledge. **The number of adults who are able to read and write** and the **number of children enrolled in schools** show how easy or difficult it is to access knowledge in a particular country.
3. **Access to Resources**- Access to resources is measured in terms of purchasing power (in U.S. dollars).

- **Measuring of human development:** Countries rank in terms of HDI value ranges from '0 to 1' based on access to resources, education, and health facilities.
- **HDI report published** First time in **1990** by UNDP (United Nations Development Programme).

## India's Performance Insights

- **Category Status**: India continues in the **Medium Human Development** tier, nearing the High tier threshold of 0.700.

## International Comparisons:

| Level of Human Development | Low | Medium | High | Very High |
|---|---|---|---|---|
| HDI Score Criteria | Below 0.550 | 0.550 and 0.699 | 0.700 and 0.799 | Above 0.800 |
| Number of Countries | 33 | 42 | 49 | 69 |
| Key Characteristics | Mostly small nations experiencing political instability, civil war, famine, or high incidence of infectious diseases. Well-targeted policies are urgently needed here. | The largest group. Most emerged post-WWII as former colonies or after the breakup of the Soviet Union in 1991. They show high social diversity and are rapidly adopting people-oriented policies. | Education and healthcare are top government priorities. These countries invest heavily in people and ensure effective governance. | Includes industrialized Western nations (primarily in Europe) and several non-European nations. High investment in the social sector and stable governance. Top 3: Switzerland, Norway, Iceland. |

### MCQ

**1** Which of the following indicators is **not** considered while calculating the Human Development Index (HDI)?

A. Life expectancy at birth B. Gross National Income (GNI) per capita

C. Mean years of schooling D. Infant mortality rate

2. Which one of the following is **not** a dimension of Human Development?

A. Health B. Education

C. Income D. Military strength

### SHORT ANSWER QUESTIONS

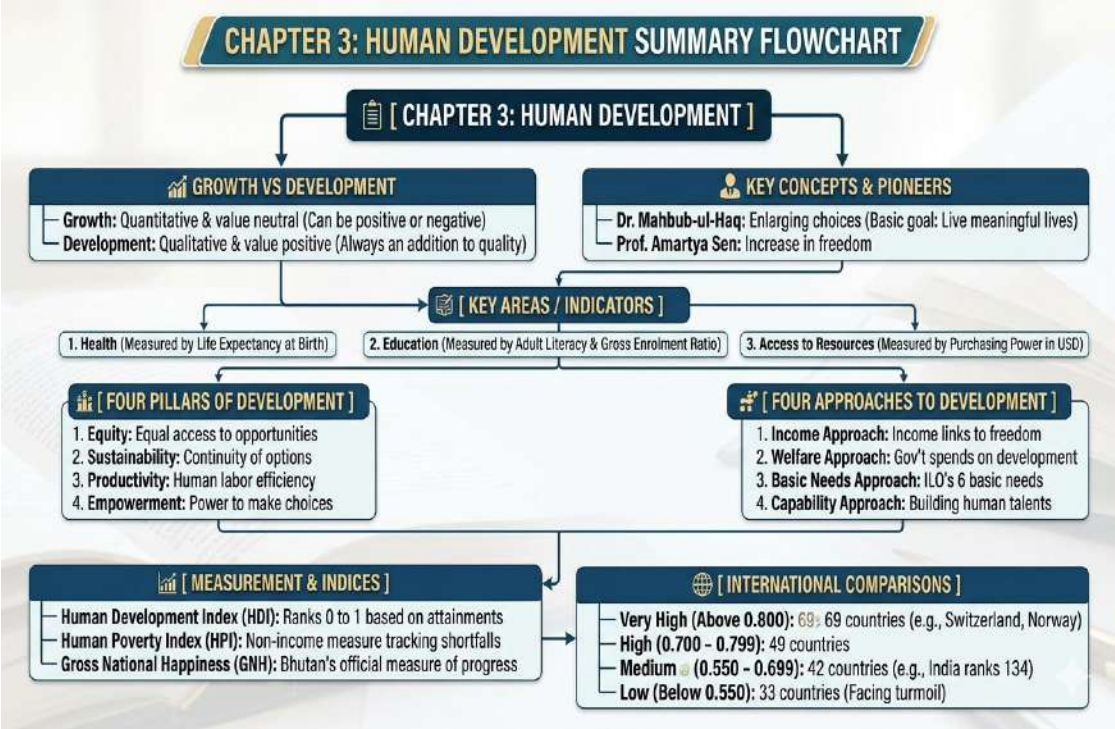
**Q1. "The basic goal of development is to create conditions where the people can live meaningful life". What do you mean by meaningful life?**

A meaningful life goes beyond mere survival or longevity. It means having the **freedom and capabilities to lead**

**a healthy, purposeful life**. It involves developing one's **talents**, accessing **education**, enjoying a decent **standard** of living with **dignity**, and actively participating as an **empowered** member of society to achieve **personal goals**.

**Q2. "The size of the territory and per capita income are not directly related to human development." Explain.**

1. Human development depends on the quality of life, not a nation's wealth or size.
2. Smaller countries often outperform larger ones in welfare, and relatively poorer nations frequently rank higher in human development than richer neighbours.
3. True progress relies on investments in health, education, and equity, rather than land size or per capita income.




MCQ ANS 1) D 2) D

**UNIT –III(Chapter 4 to 8) weightage: 19 marks**

## CHAPTER- PRIMARY ACTIVITIES

### Map Work

1. Areas of subsistence gathering
2. Major areas of nomadic herding of the world
3. Major areas of commercial livestock rearing
4. Major areas of extensive commercial grain farming
5. Major areas of mixed farming of the World

### CHAPTER SUMMARY

• There are five types of human (Economic) activities-Primary, Secondary, Tertiary, Quaternary and Quinary.
• People engaged in primary activities also known as **red collar workers**.
• Primary activities include agriculture, mining, pastoralism, cultivation, fishing, and forestry.

### HUNTING AND GATHERING –

• Oldest occupation, Low Technology, Yield per Person is very low, No Surplus.
• Primitive societies depend on animals they hunted and edible plants which they gathered.
• Practiced in harsh climate conditions –
(a) High latitude areas such as Eurasia, Southern Chile.
(b) Low latitude such as Amazon, Congo, S.E. Asian countries.

### PASTORALISM

**Nomadic Hearding**

Depending on the geographical factors, and technological development, animal rearing today is practised either at the subsistence or at the commercial level.

**Transhumance –**

The process of seasonal migration along with their cattle is known as transhumance.

In mountain regions, such as Himalayas, Gujjars, Bakarwals, Gaddis and Bhotiyas migrate from plains to the mountains in summers and to the plains from the high- altitude pastures in winters.

In the tundra regions, the nomadic herders move from south to north in summers and from north to south in winters.

| Nomadic Herding (Pastoral Nomadism) | Commercial Livestock Rearing |
|---|---|
| Done in semi-arid and arid zone of **developing countries**. | Done in semi-arid and arid zone of **developed countries**. |
| It is a primitive **subsistence activity** where herders rely on animals for their own food, clothing, shelter, tools, and transport. | It is a highly organized, specialized, and capital-intensive **commercial activity** practiced for profit. |
| Herders move from place to place along with their livestock in search of pastures and water. They occupy well-defined territories by tradition. | Animals are reared on permanent, large, and fenced ranches. They are moved between fenced parcels to regulate grazing based on carrying capacity. |
| A wide variety of animals are kept together depending on the region (e.g., cattle in tropical Africa; yaks/llamas in mountains; reindeer in Arctic regions). | It is a specialized activity where only one type of animal (like sheep, cattle, goats, or horses) is reared on a ranch. |
| Little to no modern scientific healthcare or breeding practices are used. Animals depend entirely on natural pastures. | High emphasis is placed on scientific breeding, genetic improvement, disease control, and healthcare. Products are processed and packed scientifically for global markets. |
| Mainly found in three regions:• Atlantic shores of North Africa across the Arabian Peninsula to Mongolia/Central China.• Tundra region of Eurasia.• Small pockets in South-West Africa and Madagascar. | Mainly associated with Western cultures in:• New Zealand• Australia• Argentina & Uruguay• United States of America |

### AGRICULTURE

**Subsistence Agriculture-** It can be grouped in two categories —

1. Primitive Subsistence Agriculture
2. Intensive Subsistence Agriculture

**Primitive Subsistence agriculture**

- Practiced in tropical zone of Africa, South & Central America and South – East Asia.
- Ash is used to increase fertility of soil.
- Practised by many tribes in the tropics, especially in Africa, south and central America and south east Asia
- Known as Slash and Burn / Shifting agriculture. It is known as – Jhuming – N.E. India, Milpa – Mexico, Ladang – Malaysia & Indonesia.

**Intensive subsistence agriculture**

- Largely found in densely populated regions of monsoon Asia.
- Northern China, Manchuria, North Korea and North Japan and India
- Small Landholdings
- Labour-Intensive
- Yield per unit area is quite high, but productivity per worker is low.
- The primary goal is to feed the farmer's family with very little surplus sold in local markets.
- Heavy use of natural and organic manures, with increasing usage of modern chemical fertilizers.
  **Basically, there are two types of intensive subsistence agriculture.**
  **(i) Intensive subsistence agriculture dominated by wet paddy cultivation**
  **(ii) Intensive subsistence agriculture dominated by crops other than paddy**

## Commercial farming

**EXTENSIVE COMMERCIAL GRAIN FARMING**

- Farm size-Very Large
- Commercial for selling in international market.
- Wheat is the principal crop of this farming.
- Other crops - corn, barley, oats and rye.
- Capital Intensive & highly mechanized farming.
- Low yield (Production) per acre but high yield per person.
- Practiced in
  1. Eurasian steppes 2. Canadian and American Prairies
  3. The Pampas of Argentina 4. Velds of South Africa
  5. Downs of Australia. 6. Canterbury Plains of New Zealand

**PLANTATION AGRICULTURE**

- This farming was introduced by the Europeans.
- Mainly single crop is grown. (Monoculture)
- It is practiced with Scientific methods.
- Farm size - large estates
- Commercial for selling in international market.
- Coffee Fazenda in Brazil.
- High capital investment, Technical support and Cheap labour

- Required good network of transportation that links the estates to the factories and markets for the export of the products.

| Plantation Crop | Country | Introduced By |
|---|---|---|
| Tea | India and Sri Lanka | British |
| Rubber | Malaysia | British |
| Sugarcane | West Indies | British and French |
| Banana | West Indies | British and French |
| Cocoa & Coffee | West Africa | French |

## MIXED FARMING

- Found in highly developed regions (NW Europe, EN America, temperate Southern continents).
- Farm sizes are moderate, producing grains like wheat, maize, and vital fodder crops.
- Maintained systematically using **crop rotation** and **intercropping**.
- Equal importance is laid on crop cultivation and **animal husbandry**.
- Characterized by heavy capital expenditure on advanced farm machinery and buildings.
- Relies extensively on chemical fertilizers, green manures, and high farmer expertise.

## DAIRY FARMING

- Most efficient, advanced type of rearing milch animals.
- Requires heavy investment in modern sheds, storage, and milching machines.
- Lays special emphasis on breeding, health care, and veterinary services.
- Involves continuous, rigorous labour with no off-season throughout the year.
- Practised near urban and industrial centres for fresh product demand.
- Main belts are NW Europe, Canada, and South-Eastern Australia-New Zealand.

## MEDITERRANEAN AGRICULTURE

- Highly specialised, commercial form of agriculture focused on high-value crops.
- Practised around the Mediterranean Sea, California, Central Chile, South Africa, and Australia.
- Serves as the world's primary supplier of high-quality citrus fruits.
- Grape cultivation is a specialty (**VITICULTURE**) , producing world-class wines, raisins, and currants.
- Olives and figs are major traditional crops.

## Market Gardening and Horticulture

- Focuses entirely on high-value crops like fruits, vegetables, and flowers for urban markets.
- Farms are small, situated near urban centres with excellent transportation links.
- Extremely capital and labor-intensive; utilizes irrigation, HYV seeds, and chemical fertilizers.
- Employs greenhouses and artificial heating in colder northern latitudes.
- Well-developed in industrial North-West Europe, North-Eastern USA, and Mediterranean regions.
- The Netherlands uniquely specializes in tulips, exported globally across Europe.
- **Truck Farming** : Vegetable-only farming named after the overnight driving distance of a delivery truck.
- **Factory Farming**: Modern stall-fed livestock rearing relying heavily on scientific breeding and heavy capital.

## Cooperative farming-

- Farmers **voluntarily** pool resources for higher efficiency.
- Individual land ownership remains entirely intact.

- Societies assist in procuring essential agricultural inputs.
- They help sell products on favourable terms.
- Denmark is the most successful practicing nation.

**Collective farming-**

- Farming relies on **social ownership** and collective labor.
- The **Kolkhoz** model was introduced in erstwhile Soviat Union.
- It aimed to fix previous agricultural inefficiencies.
- Farmers **pooled land**, livestock, and their labor.
- Members retained small plots for daily needs.

## MINING

### Factors Affecting Mining Activity

(i) **Physical factors** include the size, grade and the mode of occurrence of the deposits.
(ii) **Economic factors** such as the demand for the mineral, technology available and used, capital to develop infrastructure and the labour and transport costs.

### Methods of Mining: -

**Mining is classified into surface and underground types.**

**(i) The Surface mining: -**

- Surface or open-cast mining targets shallow minerals.
- This easiest, cheapest method yields rapid, large output.

**(ii) Underground mining method (shaft method): -**

- Deep deposits require the underground shaft method.
- Vertical shafts and radiating galleries reach deep ores.
- Shaft mining is risky, requiring complex safety equipment.

**The developed economies are retreating from mining, processing and refining stages of production due to high labour costs, while the developing countries with large labour force and striving for higher standard of living are becoming more important.

**MCQ**

**1 Which one of the following is a subsistence activity?**
A. Dairy farming B. Nomadic herding
C. Plantation agriculture D. Mining
**2 Which one of the following is a quaternary activity?**
A. Hunting B. Fishing
C. Research and development D. Forestry

**SHORT ANSWER QUESTIONS (3 MARKS)**

**Q1. "Gathering has become commercial in modern times". Examine the statement.**

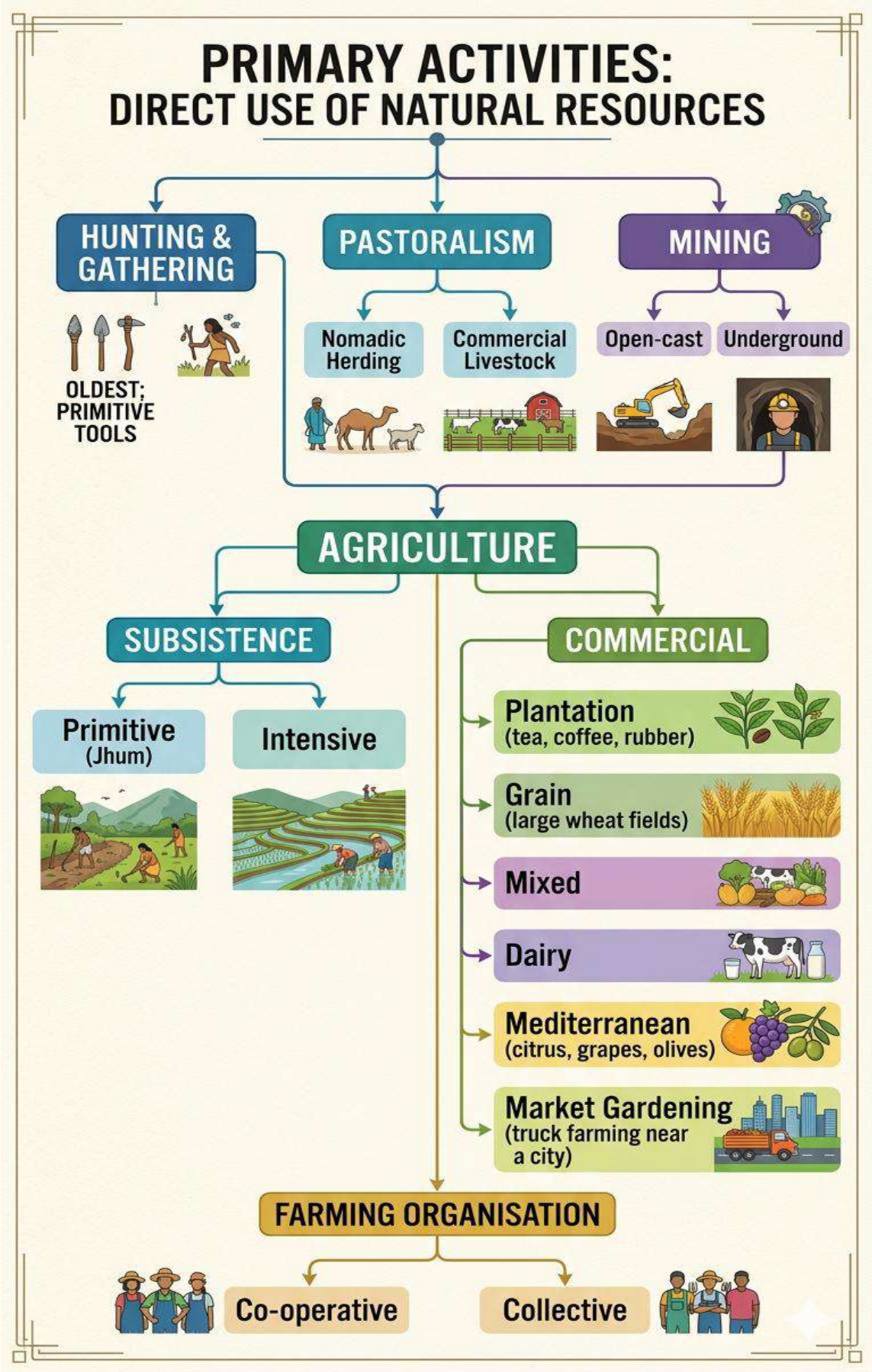
- In modern times some gathering is market oriented and has become commercial.
- Gatherers collect valuable plants such as leaves, barks of trees and medicinal plants and after simple processing sell the products in the market.
- They use various parts of the plants, for example, the bark is used for quinine, tannin extract and cork— leaves supply materials for beverages, drugs, cosmetics, fibres, thatch and fabrics; nuts for food and oils and tree trunk yield rubber, balata, gums and resins.

**Q2. "Dairy farming has developed due to urbanisation." Explain with examples.**

- Dairy farming is developed near Urban-Centres.

- Farms are located near industrial and commercial towns which provide a market for dairy products. It is closely related to urbanisation.
- There is a great demand for milk products in towns due to increasing population.
- In Europe, North-east American region and temperate grasslands of Australia and New Zealand, most of dairy centres are organised near big towns.

---


PRIMARY ACTIVITIES:
DIRECT USE OF NATURAL RESOURCES
HUNTING & GATHERING
OLDEST; PRIMITIVE TOOLS
PASTORALISM
Nomadic Herding
Commercial Livestock
MINING
Open-cast
Underground
AGRICULTURE
SUBSISTENCE
Primitive (Jhum)
Intensive
COMMERCIAL
Plantation (tea, coffee, rubber)
Grain (large wheat fields)
Mixed
Dairy
Mediterranean (citrus, grapes, olives)
Market Gardening (truck farming near a city)
FARMING ORGANISATION
Co-operative
Collective

MCQ ANS 1) B 2) C

# CHAPTER SECONDARY ACTIVITIES

## CHAPTER SUMMARY

Secondary activities add value to natural resources by changing raw materials into useful products.

### Characteristics of Modern Large Scale Manufacturing

1. **Specialisation of Skills/Methods of Production;-** Mass production involves production of large quantities of standardised parts by each worker performing only one task repeatedly.
2. **Mechanisation** :- Mechanisation refers to using gadgets which accomplish tasks.
3. **Technological Innovation** :- Technological innovations through research and development like quality control, eliminating waste and inefficiency, and combating pollution.

**Major concentrations of modern manufacturing have flourished in a few number of places.**

**Factors influencing industrial locations:-**

1. **Access to Market**

- 'Market' = people who have a demand + the purchasing power
- The developed regions of Europe, North America, Japan and Australia .

2. **Access to Raw Material**

- Industries based on cheap, bulky and weight-losing material (ores) are located close to the sources of raw material such as steel, sugar, and cement industries.

3. **Access to Labour Supply**

Labour supply is an important factor in the location of industries.

4. **Access to Sources of Energy**

Industries which use more power are located close to the source of the energy supply such as the aluminium industry.

5. **Access to Transportation and Communication Facilities**

- Speedy and efficient transport facilities to carry raw materials to the factory and to move finished goods to the market are essential for the development of industries.
- Western Europe and eastern North America have a highly developed transport system

6. **Government Policy**

- Governments adopt 'regional policies' to promote 'balanced' economic development

7. **Access to Agglomeration between Industries**

- Many industries benefit from nearness to a leader-industry and other industries. These benefits are termed as agglomeration economies.

**Footloose industries** do not depend on specific raw materials.

- Production relies on components obtainable from anywhere.
- These industries yield small quantities of output.
- They employ a relatively small labor force.

### Classification of industries

**A. Industries based on Size**

| Household / Cottage | Small Scale | Large Scale |
|---|---|---|
| Smallest unit; managed at home by local artisans. | Medium unit; based in workshops outside the home. | Massive unit; based in large, specialized factories. |
| Utilizes family members and manual labor/simple tools. | Employs semi-skilled hired labour and power-driven machines. | Requires highly specialized workers and enormous energy supplies. |
| Negligible capital; uses locally available raw materials. | Moderate capital; uses local materials to boost employment. | Huge capital investment; requires massive quantities of diverse raw materials. |
| Low-volume production of daily items for local markets. | Labor-intensive production targeting regional markets. | Automated assembly-line mass production for global markets. |

**B. Based on input/raw material-** i) Agro-based ii) Mineral based iii) Chemical based iv) Forest based v) Animal based.

**C. Based on output/product-**

| Basic Industries | Consumer Goods Industries |
|---|---|
| Industries that manufacture products used as raw materials by other industries. | Industries that manufacture goods meant for direct consumption by final consumers. |
| Form the backbone of the manufacturing sector (e.g., Iron/steel/Textile machines). | Form the final stage of the manufacturing chain (e.g., Machines , Clothes). |
| Iron and steel, smelting plants, and heavy machine-tool manufacturing. | Bread, biscuits, tea, soaps, writing paper, and televisions. |

**D. Based on ownership**

| Public Sector | Private Sector | Joint Sector |
|---|---|---|
| Owned, funded, and managed completely by the government. | Owned, funded, and managed by individual investors or private firms. | Managed by joint stock companies or the public and private sectors together. |
| Dominant in socialist countries and active in mixed economies. | Dominant in capitalist countries where businesses operate for profit. | Found commonly in mixed economies through collaborative partnerships. |
| Focuses on social welfare and public infrastructure development. | Focuses entirely on profit maximization and market expansion. | Balances social responsibility with private operational efficiency. |
| Eg: NHPC, NTPC, BSNL | Eg : TISCO, BATA, BAJAJ | Eg: VODAFONE IDEA LTD, TATA STARBUKS. |

**Concept of high technology industry-**

- Latest generation manufacturing unit.
- Application of ***R&D unit***.
- Professional workers ***(white collar)*** share large group.
- Highly skilled specialists ***(blue collar)*** also working.
- Planned business parks for high-tech industries.
- Regionally concentrated, self-sustained highly specialized techno-poles.
- ***Silicon Valley*** in San Francisco and silicon forest near Seattle are techno poles.

## MCQ

**1. Match the geographical regions in Column A with their most important livestock/animals in Column B:**

| **Column A (Region)** | **Column B (Livestock / Animals)** |
|---|---|
| (I) Tropical Africa | (A) Yak and Llamas |
| (II) Sahara and Asiatic Deserts | (B) Reindeer |
| (III) Mountainous areas of Tibet and Andes | (C) Cattle |
| (IV) Arctic and Sub-Arctic areas | (D) Sheep, Goats, and Camel |

(I) — (C) : Tropical Africa  Cattle

(II) — (D) : Sahara and Asiatic Deserts  Sheep, Goats, and Camel

(III) — (A) : Mountainous areas of Tibet and Andes  Yak and Llamas

(IV) — (B) : Arctic and Sub-Arctic areas  Reindeer

**2. Which one of the following is a footloose industry?**

A. Iron and steel industry  B. Software industry

C. Cotton textile industry  D. Automobile industry

**3. Which one of the following factors is most important in the location of iron and steel industry?**

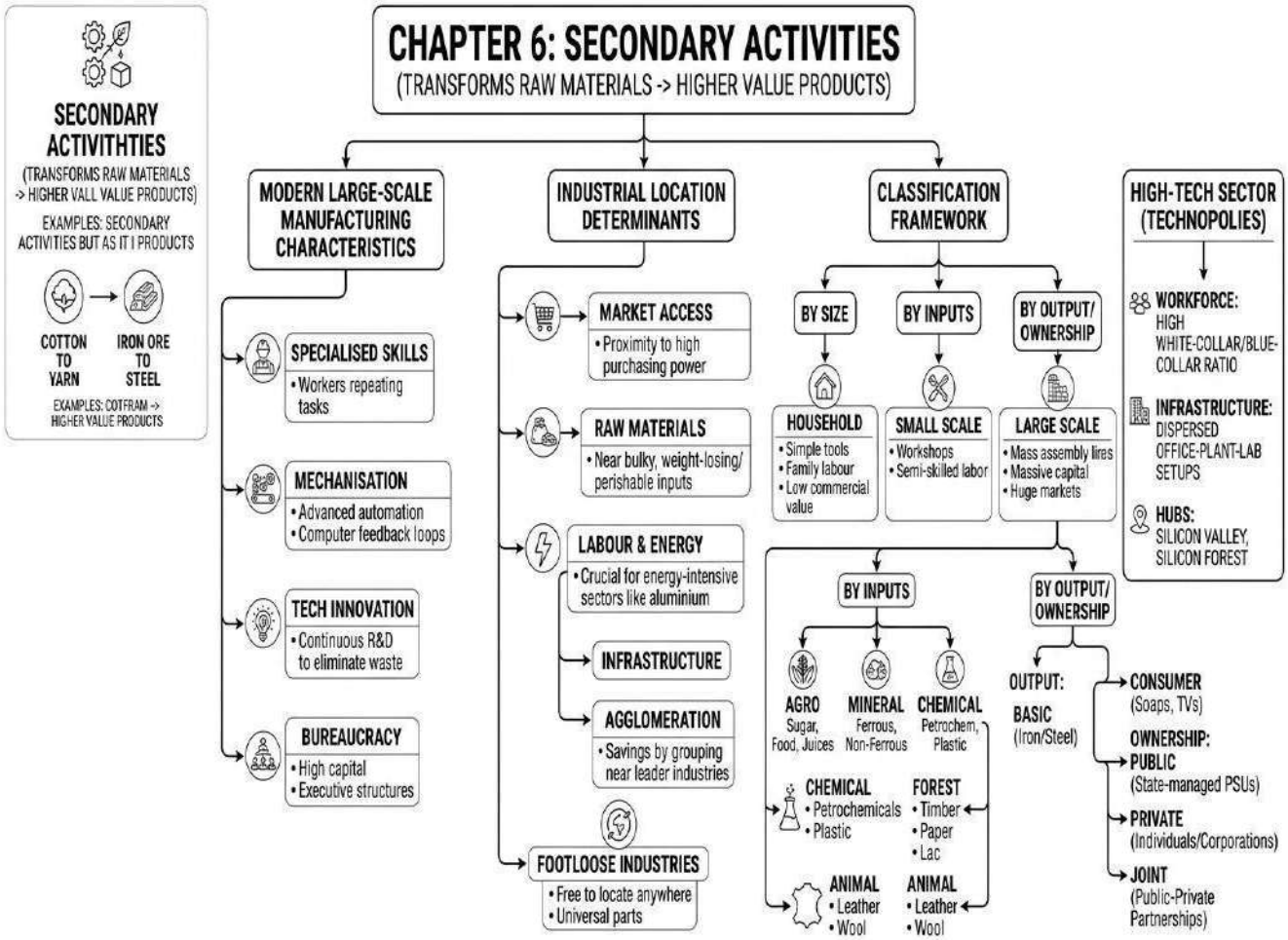
A. Availability of water  **B. Nearness to raw materials**

C. Availability of skilled labour  D. Nearness to market

## LONG ANSWER QUESTIONS (5 MARKS)

**1. Why Iron and Steel Industry is Called a Basic or Primary Industry ?**

- The iron and steel industry is called a basic industry because it provides raw materials to many other industries.
- It is also known as a primary industry in manufacturing because many industries depend on steel for production.
- Acts as the backbone of modern industrial economy.
- Promotes economic growth and employment.




---

**MCQs** **Ans 1. (i)** **2.B**

# CHAPTER-6: TERTIARY AND QUATERNARY ACTIVITIES

## CHAPTER SUMMARY

- Tertiary activities are directly linked to the service sector, where professionals provide specialized expertise and assistance in exchange for payment.
- These activities focus on the commercial output of services rather than the production of tangible, physical goods.
- Highly trained professionals - doctors, teachers, and publishers.
- Service providers - plumbers, electricians, technicians, launderers, barbers, shopkeepers.

### Key Components

- Human labour is the most important component, as most tasks are performed by skilled labour, professionally trained experts, and consultants.
- These services require specific theoretical knowledge, professional skills, and practical training.
- Services rely heavily on the experience and knowledge of the worker rather than on factory machinery or production techniques.

### Types of Tertiary Activities

A) Trade B) Transport C) Communication IV) Services.

### Trade and Commerce

- Trade and commerce is essentially buying and selling of goods produced elsewhere.
- The collection and distribution points where trading takes place are called **trading centres**.

| Rural Marketing Centres | Urban Marketing Centres |
|---|---|
| They are quasi-urban centres that primarily cater to local needs and nearby rural areas. | They are highly developed urban centres that cater to larger, more diverse populations. |
| They feature local mandis (wholesale markets), retail markets, and periodic markets (weekly or bi-weekly). | They offer both ordinary and specialized markets, including dedicated sectors for labour, housing, and finished goods. |
| They focus mainly on providing essential consumer goods and meeting daily local demands. | They provide advanced, specialized services from educational institutions and professionals like doctors, lawyers, and teachers. |
| Limited area; offers basic, low-order daily necessities for a sparse population. | Wide reach; offers everything from basic items to highly advanced, specialized goods. |

| Retail Trading | Wholesale Trading |
|---|---|
| Sells goods directly to the final customers for their personal, everyday use. | Sells goods in large quantities (bulk) to other shopkeepers or businesses, not to the final customer. |
| Done through local shops, malls, street stalls, online websites, or door-to-door selling. | Done on a huge scale using large warehouses and requires a lot of money to store massive amounts of stock. |
| Retailers buy from wholesalers. Big chain stores might buy in bulk directly to save money. | Wholesalers buy directly from the factory (manufacturer) and often let retailers buy now and pay later (on credit). |

**Different types of stores-** Consumer cooperative store, Departmental stores, Chain Stores.

### Transport

- **km distance** or actual distance of route length;
- **Time distance** or the time taken to travel on a particular route;

- **Cost distance** or the expense of travelling on a route.
- **Isochrone lines** are drawn on a map to join places equal in terms of the time taken to reach them.

**Types of Services**

| | |
|---|---|
| **Low Order Services** | It includes common and widespread services like grocery shops etc. |
| **Domestic Services** | - It includes housekeepers, cooks and gardeners which migrate from rural areas. |
| **High Order Services** | these are specialized and less common like accountants, consultants and physicians. |

**People Engaged in Tertiary Activities-**

- There has been a shift of jobs to the tertiary or service sector. In developed countries, a higher percentage of workers are employed in providing services as compared to less developed countries.
- Tourism- This industry generates jobs as people are engaged in providing accommodation, meals, transport, entertainment, infrastructure retail trading and crafts.

**Tourist Regions-**

- Tourism can be seasonal or throughout the year like warmer places around the Mediterranean coast.
- Historic towns, religious places, heritage sites offer tourism throughout the year.

**Medical Services for Overseas Patients in India**- Medical services or tourism takes place when medical treatment is combined with international tourism activity. People from developed countries like US are visiting India for medical tourism or services. This brings economic benefits to India.

| Quaternary Activities | Quinary Activities |
|---|---|
| Activities that involve the **collection, production, and dissemination of information**. | Activities that focus on the **highest level of decision-making** and policy formulation. |
| Centered around **research, development**, and advanced technical skills. | Centered around the **creation, re-arrangement, and evaluation** of new and existing ideas. |
| Involves specialized knowledge, data analysis, and technical service delivery. | Involves strategic control, executive leadership, and systemic governance. |
| Often grouped under white-collar professional categories. | Known distinctively as **"Gold Collar"** professions. |
| **Medical transcriptionists** (e.g., in Bangalore), financial analysts, and software engineers. | **CEOs of Multinational Corporations** (e.g., in New York or Copenhagen) and top government policymakers. |

| **Colour of the collar** | **Nature of work / Economic Activity** |
|---|---|
| **Red** | Primary Activities |
| **Gold** | Quinary Activities |
| **White** | Quaternary Activities |
| **Grey** | Semi-skilled |
| **Blue** | Secondary Activities |
| **Pink** | Tertiary Activities / Service Sector |

**Outsourcing-**

- It means contracting out or giving work to an outside agency to improve efficiency and to reduce cost. It is termed as **off-shoring** when work is transferred to overseas location.
- Outsourcing provides employment in developing Countries of India, China, Botswana, etc. Information technology, human resources, customer support, call centres, data processing and other IT related services are examples of outsourcing.

| Business Process Outsourcing (BPO) | Knowledge Process Outsourcing (KPO) |
|---|---|
| Handles routine, process-driven business operations (e.g., call centers, data entry). | Handles advanced, information-driven knowledge tasks and intellectual research. |
| Requires basic operational skills; focuses on reducing costs for standard tasks. | Requires highly skilled workers; focuses on advanced expertise (e.g., R&D, legal, IP research). |

**The Digital Divide:-**Development emerging from the information and communication technology is unevenly spread across the globe. Some regions have prospered while others are lagged behind. This is known as digital divide. In developing countries, this kind of divide is seen more than developed countries. Here, the metropolitan cities are developed more than rural areas.

**MCQ**

1. Which one of the following is a **tertiary activity**?

A. Banking B. Mining
C. Agriculture D. Forestry

**2.** Which one of the following is a **quaternary activity**?

A. Transport B. Trade
C. Research and development D. Tourism

**SHORT ANSWER QUESTIONS (3 MARKS)**

**Q1. "Outsourcing has resulted in the opening up a large number of job opportunities in several countries". Analyse the statement with three suitable examples**.

**Ans**-i. Outsourcing has resulted in the opening up of a large number of call centres in India, China, Eastern Europe, Israel, Philippines and Costa Rica.
ii. It has created new jobs in these countries.
iii. These countries have cheap and skilled workers.

**Q2. Discuss the significance of the service sector in modern economic development.**

**Ans.** Significances of this sector are listed below:

- Share in Net National Product,
- Helps Industrialisation
- Expands Agriculture
- Removes Regional Imbalances
- Growth of Market
- Increase Productivity
- Rise in International Trade.

**Q3. Discuss the growth of the service sector in modern economic development.**

(i) Major Contributor to GDP (ii)Technological Advancements
(iii) Globalization and Outsourcing (iv) Changing Consumer Preferences
(v) Employment Generation.

**LONG ANSWER QUESTIONS (5 MARKS)**

**Q.1 Explain any four distinct factors that act as major tourist attractions in the world.**

**1. Climate**

- Tourists from higher latitudes and colder regions prefer warm, sunny weather for beach holidays. eg - tourism to Southern Europe and the Mediterranean region.
- Mediterranean region attracts maximum tourists due to its consistent high temperatures, long hours of sunshine, and low rainfall during peak holiday seasons.

**2. Landscape**

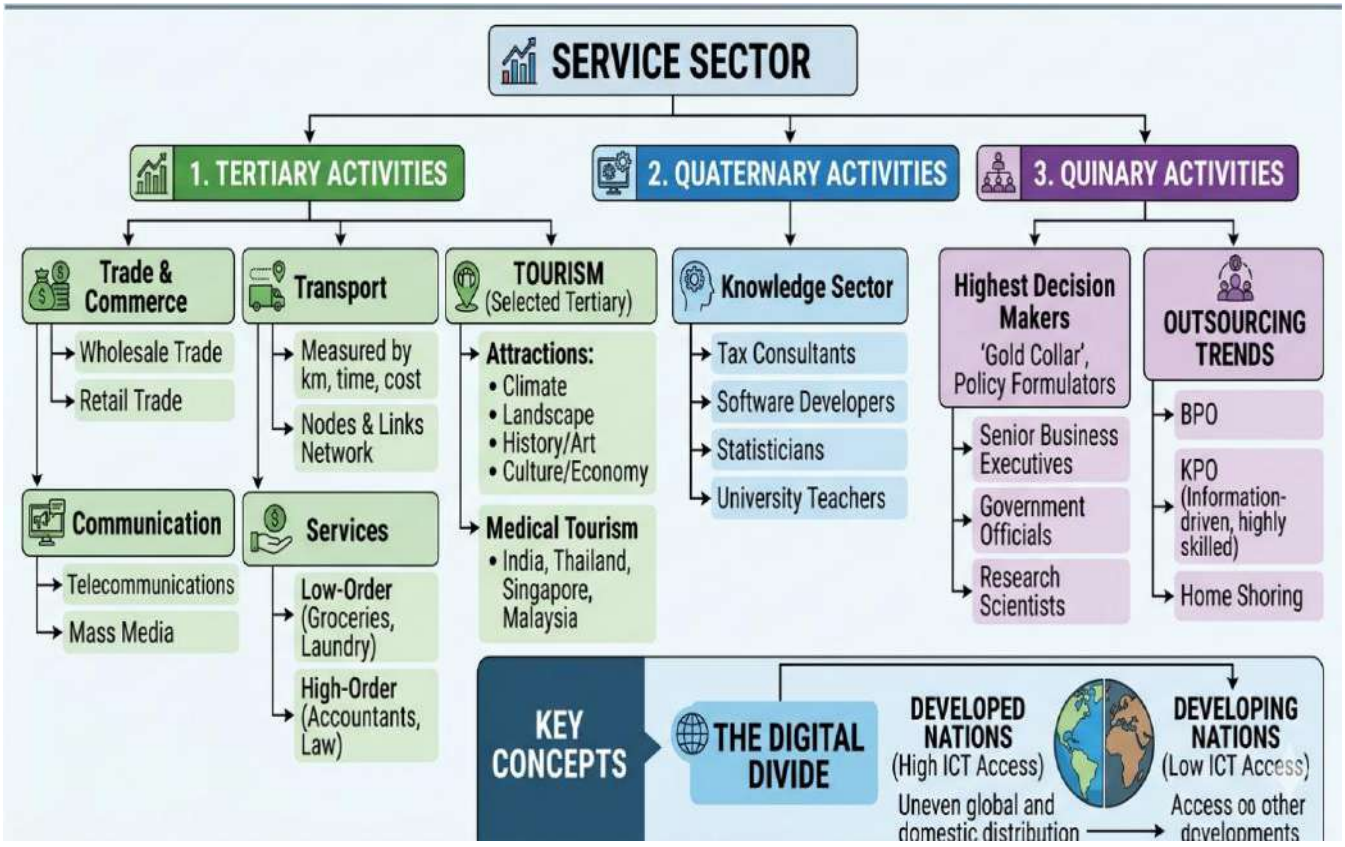
- Aesthetic and attractive natural environments are major pull factors. Tourists actively seek mountains, lakes, and dramatic coastlines.

**3. History and Art**

- Cultural Exploration: The historical background and artistic heritage of an area possess immense potential attractiveness.
- Architectural Sites: People travel to visit ancient, picturesque towns, archaeological ruins, castles, palaces, and religious structures (churches, temples).

**4. Culture and Economy**

- Tourists with an interest in experiencing distinct ethnic lifestyles, traditional customs, and local cuisines drive cultural tourism.
- A region that fulfils tourist needs at a cheaper cost becomes highly popular.
- Concepts like "Home-stays" have emerged as highly profitable businesses (e.g., heritage homes in Goa, and Madikeri/Coorg in Karnataka).




MCQ ANS 1) A 2) C

## CHAPTER-7: TRANSPORT AND COMMUNICATION

**Weightage ( chapter 7 & 8) = 7 marks**

**CHAPTER SUMMARY**

### Map Work

Terminal Stations of Transcontinental Railways- Trans-Siberian, Trans Canadian, Trans-Australian Railways

### Major Sea Ports-

Europe: North Cape, London, Hamburg
North America: Vancouver, San Francisco, New Orleans
South America: Rio De Janeiro, Colon, Valparaiso
Africa: Suez and Cape Town
Asia: Yokohama, Shanghai, Hong Kong, Aden, Karachi, Kolkata
Australia: Perth, Sydney, Melbourne

### Major Airports-

Asia: Tokyo, Beijing, Mumbai, Jeddah, Aden
Africa: Johannesburg & Nairobi
Europe: Moscow, London, Paris, Berlin and Rome
North America: Chicago, New Orleans, Mexico City
South America: Buenos Aires, Santiago
Australia: Darwin and Wellington

Inland Waterways-
Suez Canal, Panama Canal, Rhine waterways and St. Lawrence Seaways

### Types of Transport

| Mode of transport | Type | Description | Key Examples |
|---|---|---|---|
| **Land** | **Roadways** | Flexible, door-to-door service; ideal for short distances. | National Highways, Expressways, Rural Roads. |
| | **Railways** | Efficient for heavy goods and long-distance passenger travel. | Bullet trains, Freight corridors, Metros. |
| | **Pipelines** | Continuous flow for liquids and gases; high initial cost but low maintenance. | Oil, Natural gas, Water pipelines. |
| **Water** | **Inland Waterways** | Uses navigable rivers, canals, and lakes within a country. | National Waterway 1 (Ganges), Great Lakes (USA). |
| | **Oceanic Routes** | International trade via seas and oceans; most cost-effective for bulk. | Suez Canal route, North Atlantic route. |
| **Air** | **Domestic** | Fast travel within the boundaries of a single country. | Flights between cities of same country. |
| | **International** | Connects different countries and continents; vital for high-value/perishable goods. | Long transcontinental flights. |

**Roads**

- Road transport is the most economical for short distances compared to railways.

- Freight transport by road is gaining importance because it offers ***door-to-door service***.
- But unmetalled roads, though simple in construction, are not effective and serviceable for all seasons.
- During the rainy season these become unmotorable and even the metalled ones are seriously handicapped during heavy rains and floods.
- The world's total motorable road length is only about 15 million km, of which North America accounts for 33 per cent.
- The highest road density and the highest number of vehicles are registered in North America.

## HIGHWAYS

In North America, highway ***density is high,*** about ***0.65 km per sq km***. Every place is within 20 km distance from a highway.

**Major Highways of the World**

| Highway Name | Country/Region | Connects | Importance |
|---|---|---|---|
| **Trans-Canadian Highway** | Canada | Vancouver to St. John's City | Connects west and east coast of Canada |
| **Alaskan Highway** | Canada & Alaska | Edmonton to Anchorage | Connects Canada with Alaska |
| **Pan-American Highway** | North & South America | South America, Central America, USA, and Canada | Long international highway network |
| **Stuart Highway** | Australia | Darwin to Melbourne | Connects north and south Australia |
| **Moscow–Vladivostok Highway** | Russia | Moscow to Vladivostok | Important eastern highway route |
| **Chengdu–Lhasa Highway** | China (Tibet) | Chengdu to Lhasa | Connects Tibet with China |
| **Algiers–Conakry Highway** | Africa | Algeria to Guinea | Important African highway |
| **Cairo–Cape Town Highway** | Africa | Egypt to South Africa | Connects north and south Africa |

### Border Roads-

Roads laid along international boundaries are called border roads. They play an important role in integrating people in remote areas with major cities and providing defence.

### Railways-

- Railways are a mode of land transport for bulky goods and passengers over long distances.
- First public railway line was opened in **1825** between **Stockton** to **Darlington** in northern England
- **Commuter trains** are very popular in U.K., U.S.A, Japan and India.
- Europe has one of the **most dense rail networks** in the world
- **Belgium** has the **highest density** in the world of 1 km of railway for every 6.5 sq kms area.

- Underground railways **Channel Tunnel** are operated by Euro Tunnel Group through England, **connects London with Paris**

## Trans–Continental Railways

Trans–continental railways run across the continent and link its two ends. The following are the most important of these:

## Important Common Points

- Connects the eastern region directly to the western region.
- Links major agricultural zones with heavy industrial belts.
- Serves as the vital economic artery for the country.
- Holds critical strategic importance for national security and defense.
- Transports wheat, ore, chemicals, machinery, timber, and industrial goods.

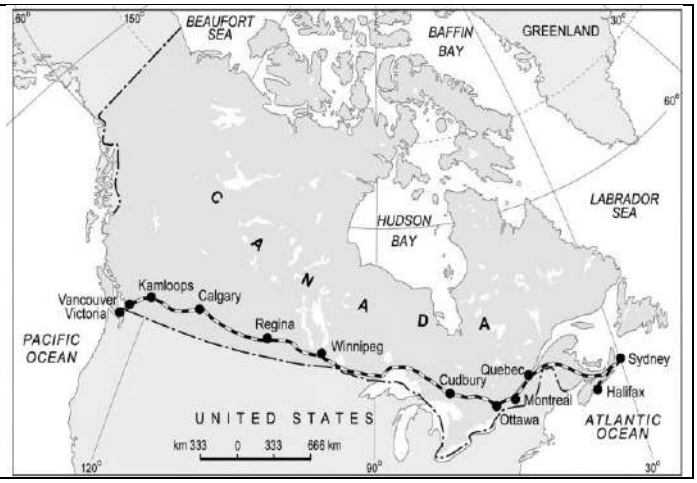
## Trans–Siberian Railway

- The Trans–Siberian Railway is the major rail route of **Russia**.
- It runs from **St. Petersburg** in the west to **Vladivostok** on the Pacific Coast in the east.
- It is the **longest trans-continental railway in the world.**
- Total length: **9332 km**.
- It is a **double-tracked and electrified railway line**.
- It helped in developing the Asian part of Russia and connecting it with West European markets.
- Chita is an important **agro-centre.**
- Irkutsk is famous as a **fur centre.**



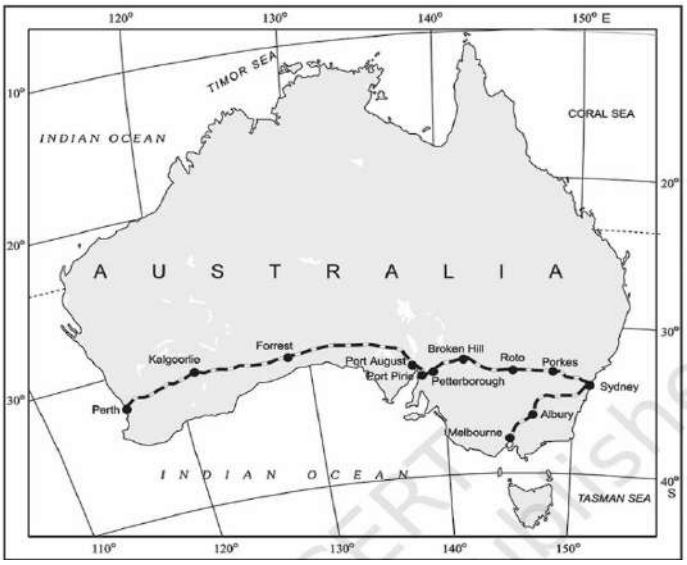

## Trans–Canadian Railway

- The Trans–Canadian Railway is an important railway line in Canada.
- Total length: **7,050 km**.
- It runs from **Halifax** in the east to **Vancouver** on the Pacific Coast.
- It is called the **economic artery of Canada**.
- Wheat and Meat are important export on this rout.



The Australian Trans–Continental Railway

- It runs west to east across the southern part of Australia.
- It connects **Perth** on the west coast with **Sydney** on the east coast.
- Important stations on this route are **Kalgoorlie**, **Broken Hill**, and **Port Augusta**.
- A major **north–south railway line** connects **Adelaide** with **Alice Springs**.
- This line is planned to extend further and connect with the **Darwin–Birdum line**.




**The Union and Pacific Railway-**

● Connects New York on the Atlantic Coast to San Francisco on the Pacific Coast.

**Orient Express -**

● The Orient Express is an important railway route in Europe.

● It runs from **Paris** to **Istanbul**.

● Important cities on the route: Strasbourg ,Munich ,Vienna ,Budapest ,Belgrade.

**WATER TRANSPORT**

● One of the great advantages of water transportation is that it does not require route construction.

● All that is needed is to provide port facilities at the two ends.

● It is much cheaper because the friction of water is far less than that of land.

● Water transport is divided into sea routes and inland waterways.

**Sea Routes-**

● The oceans offer a smooth highway traversable in all directions with no maintenance costs.

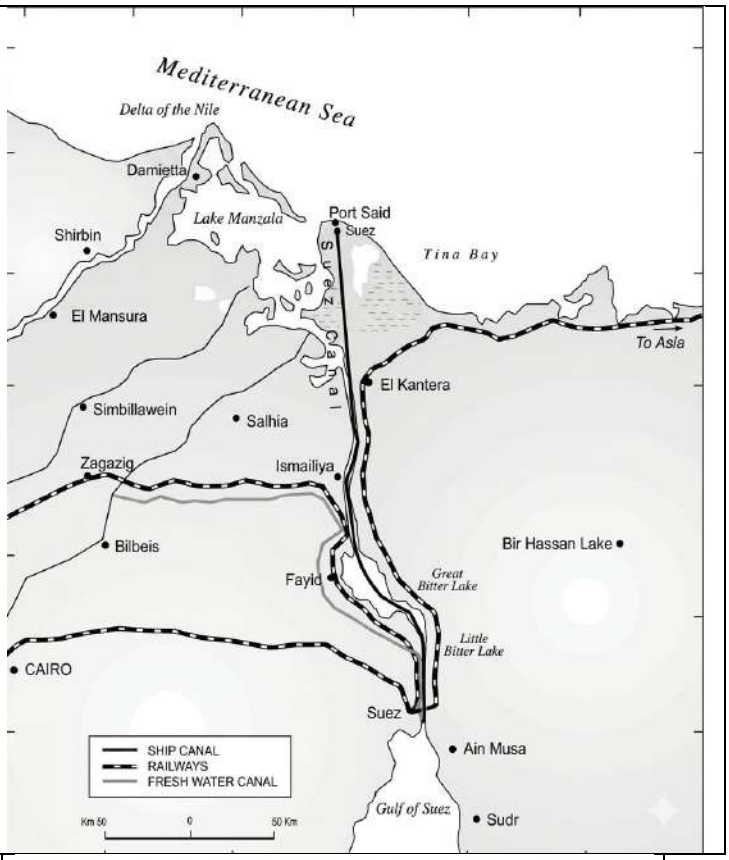
● Compared to land and air, ocean transport is a cheaper means of haulage (carrying of load) of bulky material over long distances from one continent to another.

- The Northern Atlantic Sea Route :-
  - **Busiest Sea Route in the world**
  - **Big Trunk Route.**

**Shipping Canals**

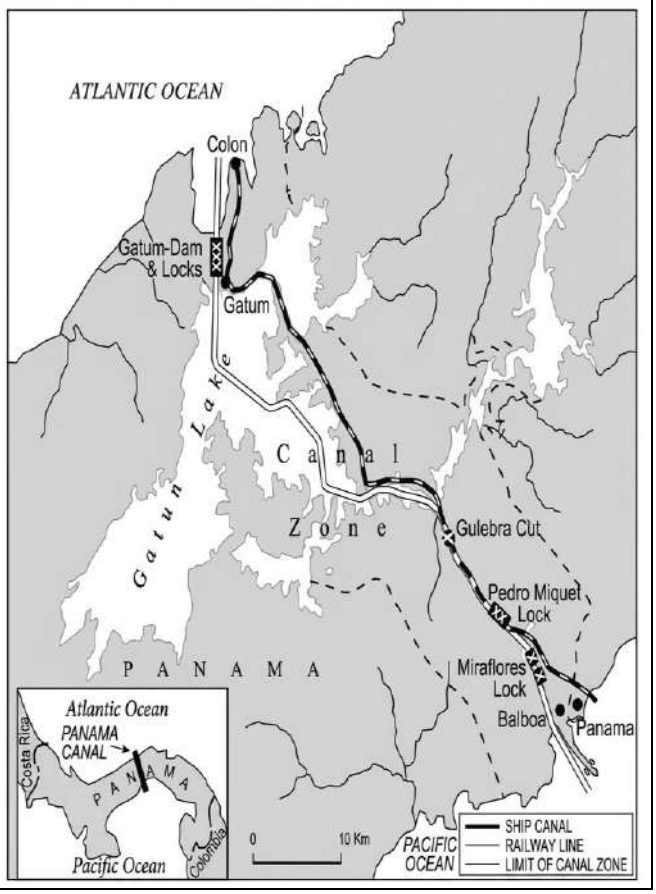
## The Suez Canal- Suez Canal

- The **Suez Canal** was constructed in **1869** in Egypt.
- It connects **Port Said** in the north with **Port Suez** in the south.
- The canal links the **Mediterranean Sea** and the **Red Sea**.
- It provides Europe with a shorter sea route to the **Indian Ocean**.
- The canal is a **sea-level canal without locks**.
- Its length is about **160 km**.
- The depth of the canal ranges from **11 to 15 metres**.
- About **100 ships pass daily** through the canal.
- A **railway line** runs parallel to the canal up to Suez.
- From **Ismailia**, a branch railway line connects to **Cairo**.
- A **fresh-water canal from the Nile River** joins the Suez Canal at Ismailia.
- This canal supplies fresh water to **Port Said** and **Suez**.




## Panama Canal

- The Panama Canal connects the **Atlantic Ocean** in the east with the **Pacific Ocean** in the west.
- It was constructed across the **Panama Isthmus** between **Panama City** and **Colón**.
- The canal was built by the government of the United States.
- The canal is about **72 km long**.
- It includes a **deep cutting of about 12 km** in length.
- The canal has a **six-lock system**.
- It also reduces the distance between:
  - **Western Europe** and the **west coast of the U.S.A.**
  - **North-eastern & Central U.S.A.** and **East & South-east Asia**
- The economic importance of the Panama Canal is **less than that of the Suez Canal**.
- However, it is very important for the economies of **Latin America**.

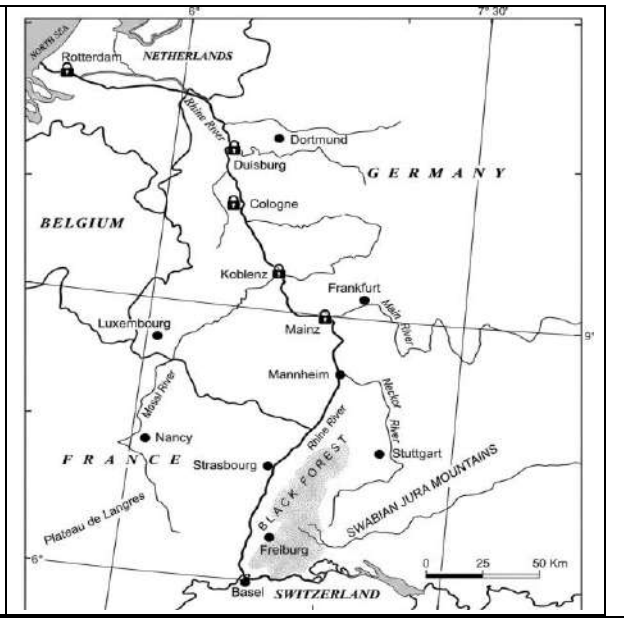



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. **Inland Waterways-** Rivers, canals, lakes and coastal areas have been important waterways since time immemorial.

Rhine Waterway

- The **Rhine River** flows through Germany and Netherlands.
- It is navigable for about **700 km** from **Rotterdam** in the Netherlands to **Basel** in Switzerland.
- The **Ruhr River** joins the Rhine from the east.
- **Düsseldorf** serves as an important Rhine port for this industrial area.
- The Rhine waterway is the **world's busiest inland waterway**.




Bottom of Form

**The Volga Waterway-** Russia

Air Transport

- Air transport is the fastest means of transportation.
- It is also a **costly mode of transport**.
- It is preferred for **long-distance passenger travel** .
- Valuable and perishable goods can be transported quickly across the world.
- Air transport is often the **only way to reach inaccessible areas**.
- Airways have great **strategic and military importance**.

**Pipelines-**

- Liquids like mineral oil, water, sludge and sewers are transported by pipelines
- Pipelines are used extensively to transport liquids and gases such as water, petroleum and natural gas for an uninterrupted flow.
- ***Big Inch*** is one such famous pipeline, which carries petroleum from the oil wells of the ***Gulf of Mexico to the North-eastern States***. About 17 percent of all freight per tonne-km. is carried through pipelines in U.S.A.

**Communications**

**Satellite Communication-**

- Internet is the largest electronic network. This form became important since 1970s after USA and the then USSR pioneered space research.
- Powers mobile phone calls, SMS text messages, cable television broadcasting, and real-time weather forecasting.
- Artificial satellites connect the remote corners of the globe.

| | |
|---|---|
| Aryabhatt | (1975) |
| Bhaskar-I | (1979) |
| Rohini | (1980) |
| APPLE | (1981). |

## Cyberspace – Internet

- Cyberspace is the world of electronic computerised space. It is the electronic digital world for communicating or accessing information over computer networks without physical movement of the sender and the receiver.
- Expands human interaction via e-mail, e-commerce, digital e-learning, and active e-governance platforms.

### MULTIPAL CHOICE QUESTIONS (1 MARK)

1. **Assertion (A):** Trans-Siberian Railway Line is the most important route in the Asia.
**Reason (R):** It has helped in opening up Asian region to West European markets
A. Both A and R are true and R is the correct explanation of A.
B. Both A and R are true and R is the not correct explanation of A.
C. A is true but R is false.
D. A is false but R is true.

**2. Assertion (A):** Ocean transport is a cheaper means of haulage (carrying of load) of bulky material over long distances from one continent to another.
**Reasons (R):** The oceans offer a smooth highway traversable in all directions with no maintenance costs.

A. Both (A) and (R) are true and (R) is the correct explanation of (A).
B. Both (A) and (R) are true but (R) is not the correct explanation of (A).
C. (A) is correct but (R) is wrong. d) (A) is wrong but (R) is correct.
D. A is false but R is true.

### LONG ANSWER QUESTIONS (5 MARKS)

**Q1. Communication through Satellites emerged as a new era in communication technology. Justify.**

- Artificial satellites connect even the remote corners of the globe with limited onsite verification.
- These have rendered the unit cost and time of communication invariant in terms of distance.
- It has made long distance communication, television and radio very effective.
- Weather forecasting through television is boon.
- It connects about 1000 million people in more than 100 countries.

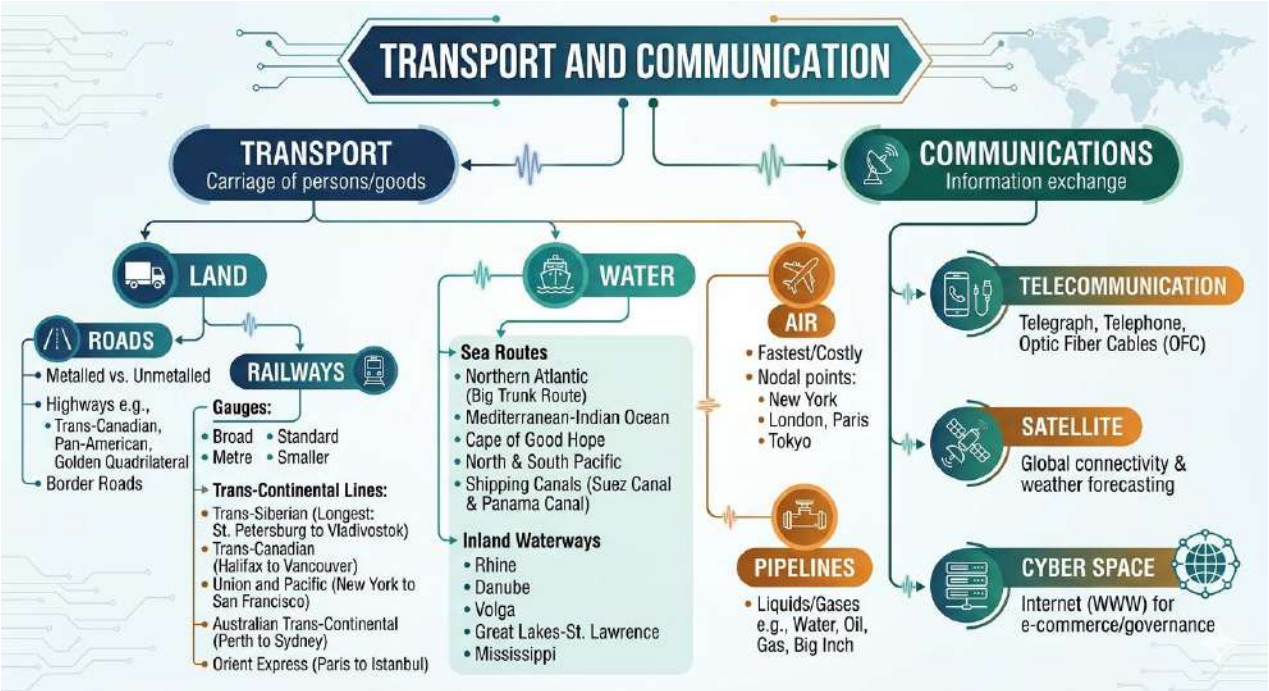
**Q2. Name the principal mode of transportation in the world which is used for carrying liquid and gaseous materials only. Mention any four characteristics of this mode of transportation.**

- The means of transport used extensively for carrying water, petroleum, natural gas and other liquids is pipeline transport.
- There is a dense network of pipelines in the USA which runs from the producing areas to the consuming areas.
- One such famous pipeline is Big Inch Pipelines are used extensively to connect oil wells to pots and the refineries or domestic markets.
- The longest proposed international oil and natural gas pipeline' will pass through Iran, India and Pakistan.
- In New Zealand, milk is being supplied through pipelines from farms to factories.

**Q3. Describe the journey of development of land transport from the days of humans as carriers and the cableways of today.**

- Land transport refers to the movement of goods and services that takes place overland by way of road or rails.
- In earlier days, humans themselves were carriers. People were carried on palanquin (palki/doli).
- Later animals were used as beasts of burden as on mules, horses and camels.
- With the invention of the wheel, carts and wagons were made that facilitated land transport.

- The first railway line was started in 1825 in Northern England and railways became the most popular and fastest mode of transportation.




MCQ ANS 1) A 2) B

# CHAPTER-8: INTERNATIONAL TRADE

## CHAPTER SUMMARY-

●Initial form of trade is barter system = Exchange of Goods

### History of International Trade-

●In ancient times- trade was restricted to local markets.

●Silk route- Rome to china- transport of Chinese silk, Roman wool and precious metals.

●$15^{th}$ century- European colonialism gave a new form of trade- slave trade.

●After industrial revolution- industrialized nations imported raw materials and exported finished products to on industrialized nations.

## Basis of international trade

### Difference in national resources

●National resources are unevenly distributed because of differences in geology, relief, soil and climate.

●Geology determines the mineral resource base and topographical differences.

**Climate influences the type of flora and fauna in a given region.**

### Population factors-

●Distinctive forms of art and craft develop in certain cultures which are valued world over for Eg. Porcelains from china, carpets of Iran.

●Densely populated countries have large volume of internal trade but little external trade.

●Standard of living of the population determines the demand for better quality imported products

### Stage of economic development-

●Stage of economic development influence the nature of items traded.

●In agriculturally important countries agro products are exchanged for manufactured goods.

●Industrialized nations export machinery and finished products and import food grains and other raw materials

### Extent of foreign investment-

●It can boost trade in developing countries which lack in capital

●They develop capital intensive industries like mining, oil drilling, plantation agriculture etc.

●The industrial nations ensure import of food stuffs and minerals and create markets for their finished products

### Transport-

●Expansion of rail, ocean and air transport, better means of refrigeration and preservation trade has experienced spatial expansion.

**Balance of trade-** The difference between the volume of goods and services imported as well as exported by a country to other countries

- Negative/ unfavourable balance of trade = import value > export value
- Positive/favourable balance of trade = export value > import value
- Negative balance- country spends more on buying goods than it can earn by selling its goods. This would

ultimately lead to exhaustion of its financial reserves

## Types of international trade-

**Bilateral trade-** Trade done by two countries with each other. The countries enter into an agreement to trade specified commodities amongst them.

**Multilateral trade-** Trade conducted with many trading countries. The same country can trade with a number of other countries.

## Case of Free Trade

- The act of opening up economies for trading is known as free trade or trade liberalization.
- The trade barriers like tariffs is brought down for free trade.
- Trade liberalization allows goods and services from everywhere to compete with domestic products and services.

### Dumping

The practice of selling a commodity in two countries at a price that differs for reasons not related to costs is called dumping

## World Trade Organization (WTO)

- In **1948**, the **General Agreement on Tariffs and Trade (GATT)** was formed to reduce:
- Aim- to liberalise the world from high customs tariff and various other types of restrictions.
- In **1994**, member countries decided to create a permanent organisation for promoting free and fair international trade.
- On **1 January 1995**, GATT was transformed into the **World Trade Organization (WTO)**.
- WTO is the only international organisation dealing with the **global rules of trade** between nations.

## Functions of WTO

- Promotes **free and fair trade** among countries.
- Sets rules for the **global trading system**.
- Resolves trade disputes between member nations.
- Deals with issues related to **intellectual property rights**.

## Criticism of WTO

- Critics argue that free trade:
    - benefits rich countries more,
    - increases the gap between rich and poor nations.
- Powerful countries in WTO often focus on their own commercial interests.
- Many developed countries do not fully open their markets to products from developing countries.
- Issues often ignored include:
    - health,
    - workers' rights,
    - child labour, and
    - environmental protection.

Regional Trade Blocs :- Regional Trade Blocs are groups of countries formed to promote trade among nearby nations.

Gateways of International Trade – Ports

- Harbours and ports are the main gateways of international trade.
- Goods (cargo) and passengers move from one part of the world to another through ports.
- Ports provide important facilities such as:
  - docking of ships,
  - loading of goods,
  - unloading of goods, and
  - storage of cargo.
- Port authorities maintain navigable channels for smooth movement of ships.
- The importance of a port is measured by the number of ships arriving and departing.
- A large quantity of cargo indicates a well-developed hinterland.
- Ports play a major role in promoting international trade and economic development.

**International trade-**

**Advantages**

- Regional specialization
- Higher level of production
- Better standard of living
- World wide availability of goods and services
- Equalization of prices and wages
- Diffusion of knowledge and culture.

**Disadvantages / Key Concerns of International Trade**

- Intense global competition drives excessive extraction. Natural resources, including large-scale forest timber, are consumed faster than their natural replenishment rate.
- Rapidly declining marine life due to overexploitation, and the privatization of river basins to commercial drinking water companies.
- Many multinational corporations prioritize short-term profit maximization, routinely ignoring fundamental principles of sustainable development.
- Excessive commercial focus bypasses critical environmental protection measures and fails to address urgent public health concerns, creating severe pollution.
- Trade deepens uneven levels of economic development between nations, forcing a risky dependence on other countries for essential commodities.
- Aggressive commercial rivalry and intense economic competition over market dominance can escalate into international conflicts and wars.

**Types of port**

**On the basis of cargo handled**

- **Industrial ports-** These ports specialize in bulk cargo transported unpacked in large quantities E.g.- grains, ore.

- **Commercial ports-** Handle general cargo, packaged products and manufactured good (boxes, bales, barrels). Also handle passenger traffic.
- **Comprehensive ports-** Handle bulk and general cargo.

### On the basis of location-

- **Inland ports-** Located away from sea coast, Linked to the sea through a river or canal, Eg- Kolkata on river Hugli.
- **Out ports-** These are deep water ports built away from the actual ports, serve parent ports by receiving large sized ships unable to reach them. example, is Athens and its out port Piraeus in Greece.

### On the basis of functions-

| Port Type | Core Functions & Characteristics | Key Examples |
|---|---|---|
| **Oil Ports** | Deal with the processing, refining, and bulk shipping of oil. Types –i) Tanker ports (shipping) ii) Refinery ports (processing). | ● Tanker Ports: Maracaibo (Venezuela), Esskhira (Tunisia), Tripoli (Lebanon)<br>● Refinery Port: Abadan (Gulf of Persia) |
| **Ports of Call** | Developed originally as commercial calling stations on major sea routes for refuelling, watering, and replenishing food supplies. | ● Singapore<br>● Aden<br>● Honolulu |
| **Packet Stations** | Also known as ferry ports; specialized in transporting passengers and mail bags across short distances over water bodies. | Dover (England) and Calais (France) across the English Channel |
| **Entrepot Ports** | Function as collection and distribution centers where goods are imported from various countries to be re-exported. | ● Singapore (for Asia)<br>● Rotterdam (for Europe)<br>● Copenhagen (for the Baltic region) |
| **Naval Ports** | Hold purely strategic and military importance; designed to serve warships and equipped with authorized repair workshops. | ● Kochi (India)<br>● Karwar (India) |

## MULTIPLE CHOICE QUESTIONS (1 MARK)

**Q1.** Assertion (A): Lowlands have greater agricultural potential compared to mountainous regions.
Reason (R): Lowlands are good for laying down extensive and well-connected transportation networks.
a) Both A and R are true, and R is the correct explanation of A.
b) Both A and R are true, but R is not the correct explanation of A.
c) A is true, but R is false.
d) A is false, but R is true.

**Q2.** Assertion (A): Densely populated countries have large volumes of internal trade but relatively little external trade.
Reason (R): Most agricultural and industrial production in thinly populated countries is consumed in local markets.
a) Both A and R are true, and R is the correct explanation of A.
b) Both A and R are true, but R is not the correct explanation of A.
c) A is true, but R is false.
d) A is false, but R is true.

**Q3.** Assertion (A): Foreign investment can boost trade in developing countries.
Reason (R): Foreign investment provides the capital needed for developing industries like mining, oil drilling, and plantation agriculture in developing nations.

a) Both A and R are true, and R is the correct explanation of A.
b) Both A and R are true, but R is not the correct explanation of A.
c) A is true, but R is false.
d) A is false, but R is true.

**Q4.** Consider and evaluate the following statements and choose the correct answer with the help of given options.
I. Densely populated countries have large volume of internal trade but little external trade
II. Most of the agricultural and industrial production of these countries consumed in the local market due to large size of population.

Options-
a. Only statement II is correct
b. Both the statements I and II are correct but statement II does not explain statement I correctly
c. Both the statements are true and statement II correctly explains statement I
d. Both the statements are incorrect

## SHORT ANSWER QUESTION (3 MARKS)

**What are advantages and disadvantages of road transport?**

**Advantages:**

- Most economical for short distance compared to railways.
- Freight transport by road is gaining importance as it offers door to door service.
- Roads are cheaper, easier and simple to construct and maintain than the railways.
- They can be taken through any terrains and negotiate bends unlike railways..
- Since railways cannot be taken to every corner, so roads play an important role in nation's trade and commerce and for promoting tourism.

**Disadvantages:**

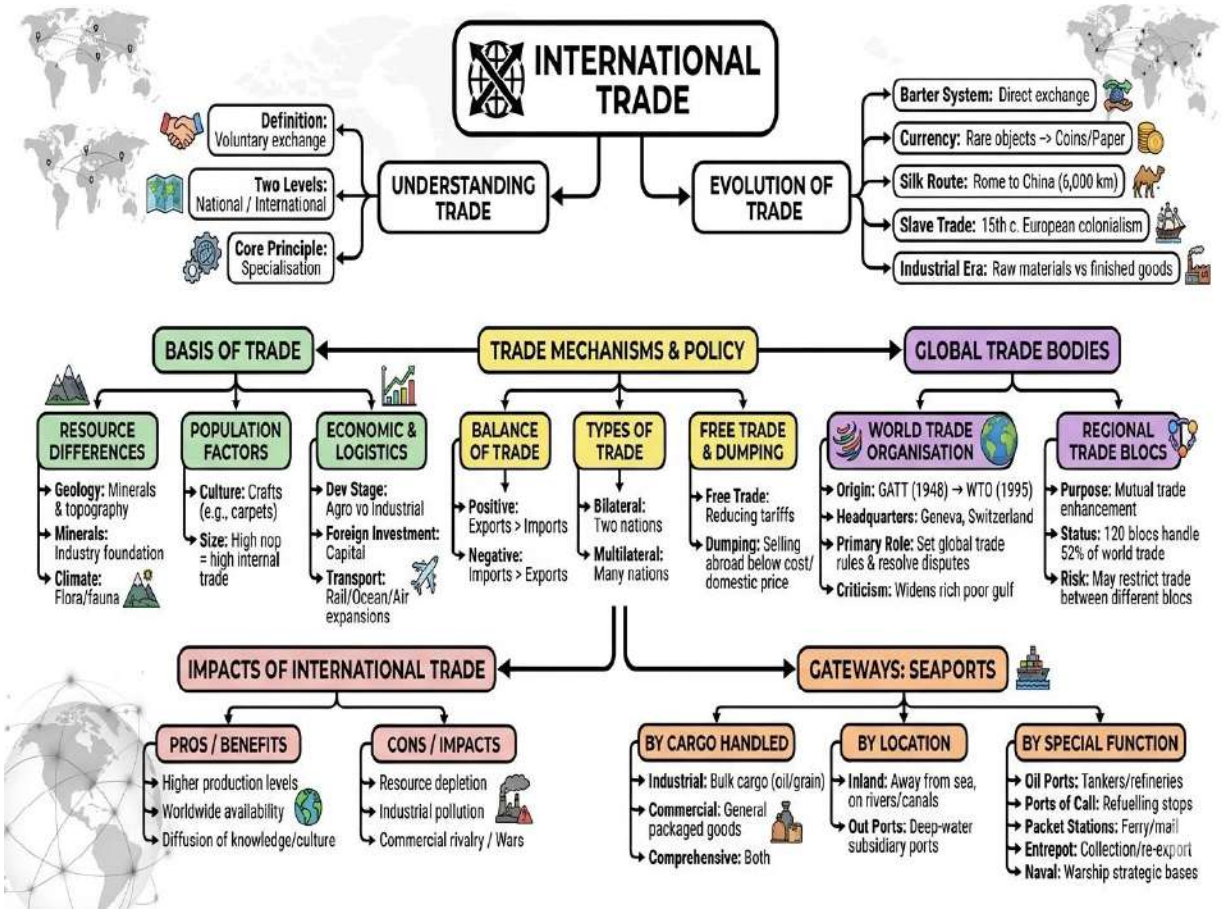
- Unmetalled roads are not effective and serviceable throughout the year, even the metalled roads become unmotorable during heavy rains and floods.
- Carrying capacity of roadways per vehicle is much lower than the railways.
- The quality of roads in the developing countries is not good as it requires heavy investment for construction and maintenance.
- City roads suffer from chronic traffic congestion. As a result of this most of the cities face the problem of traffic congestion.

## LONG ANSWER QUESTION (5 MARKS)

**Q1. "Ports are called the gateways of international trade because most of the international trade of any country is transported through sea routes." Analyse the statement and suggest the measures to improve the port infrastructure of any country?**

- Ports are vital for international trade as they act as the primary points of entry and exit for goods, with sea routes being the most cost-effective mode of transportation.
- Efficient ports facilitate faster movement of goods, reducing costs and improving trade competitiveness.
- To improve ports, a country can invest in modern infrastructure, such as expanded docking facilities and advanced cargo handling technology.
- Upgrading transportation links (rail, road) to ports can also improve connectivity.
- Enhancing port security, introducing automation, and ensuring environmental sustainability are crucial measures.

- Additionally, streamlined customs procedures and better logistics management can reduce delays and improve overall port efficiency.




MCQ ANS 1) A 2) C 3) A 4) C

**BOOK- INDIA: PEOPLE AND ECONOMY**

**UNIT-I (WEIGHTAGE: 5 MARKS)**

## CHAPTER-1: POPULATION: DISTRIBUTION, DENSITY, GROWTH AND COMPOSITION

**Map Work**

**State with highest population density & state with lowest population density (2011)**

## CHAPTER SUMMARY

Total Population: 1,210 million (India is the world's 2nd most populous country).

Average Density: 382 persons per sq. km.

Decadal Growth Rate (2001-2011): 17.64%.

Annual Growth Rate: 1.64%.

Rural-Urban Ratio: 68.8% Rural and 31.16% Urban.

### Distribution & Density

1. Uneven Distribution: Uttar Pradesh has the highest population, followed by Maharashtra, Bihar, and West Bengal.

Density Extremes: Bihar (1102) has the highest state density, while Arunachal Pradesh (17) has the lowest.

Factors Affecting Distribution: * Physical: Climate, terrain, and water availability (North Indian Plains are densely populated).

Socio-Economic: Evolution of settled agriculture, transport networks, and industrialization.

**Density of Population**- Expressed as number of persons per unit area.

| **Density = Population /Area** | |
|---|---|
| Physiological Density = Total Population / Net Cultivated Area | Agricultural Density = Total Agricultural Population / Net Cultivated Area |

**Growth of Population-** It is the change in the number of people living in a particular area between two points of time.

**Natural Growth-** It is analysed by assessing the crude birth and death rates.

**Induced Growth-** It is analysed by inward and outward movement of people in a given area.

| Phase | Period | Status / Name | Growth Characteristics | Major Reasons (Factors) |
|---|---|---|---|---|
| Phase I | 1901-1921 | Stagnant/ Stationary | Very low or Negative growth (-0.31% in 1911-21). High Birth Rate = High Death Rate. | Poor health services, famines, illiteracy, and lack of food distribution. |
| Phase II | 1921-1951 | Steady Growth | Consistent and steady increase. Death Rate started falling, Birth Rate remained high. | Improvements in sanitation, health, and better transport/communication. |
| Phase III | 1951-1981 | Population Explosion | Rapid increase (Average 2.2% annual). Massive drop in Death Rate, High Fertility. | Centralised planning (Development), better living conditions, and International migration. |
| Phase IV | 1981-2011 | Slowing Down | Growth rate is high but gradually declining. Birth Rate is falling. | Increase in mean age at marriage and improved female education. |

### Population Composition

### 1. Linguistic-

The speakers of Hindi have highest percentage.

Classification of Modern Indian Languages

| Language Family | Percentage | Alternative Name |
|---|---|---|
| Aryan | 73.00% | Indo-European |

| | | |
|---|---|---|
| Dravida | 20.00% | Dravidian |
| Nishada | 1.38% | Austric |
| Kirata | 0.85% | Sino-Tibetan |

**2. Working Population-**

**Main Workers-** 39% of the population is main workers.

**Non-Workers-** 61% of the population is non-workers.

**Marginal Workers-** 39% of the population is marginal workers.

| Category | Definition | Share of Population (2011) |
|---|---|---|
| Main Worker | A person who works for at least 183 days (6 months) a year. | 39.8% |
| Marginal Worker | A person who works for less than 183 days a year. | |
| Non-Worker | A person who does not engage in any economic activity. | 60.2% |

**3. Religious-**Hindus are distributed as a major group in many states.

- Hindus (79.8%), Muslims (14.2%), Christians (2.3%), Sikhs (1.7%), Buddhists (0.7%), and Jains (0.4%).

4. **Adolescents (10–19 years):** Comprise 20.9% of the population.

**5. Occupation-**

**a. Rural-** Bihar and Sikkim have very high rural population. Percentage wise rural population is highest in the state of Himachal Pradesh and Highest urban population percentage wise in Goa.

**b. Urban**- Urban population has seen an increase due to economic development.

**MULTIPLE CHOICE QUESTIONS (1 MARK)**

Q1. Arrange the following religious group of people according to their percentage in the total population of India.

a) Christians, Hindus, Muslims, Sikhs b) Hindus, Muslims, Christians, Sikhs

c) Muslims, Christians, Hindus, Sikhs d) Sikhs, Muslims, Christians, Hindus.

**Q.2.** Which one of the following language groups is the smallest in India ?

(A) Sanskrit, Bodo and Manipuri

(B) Kannada, Tamil and Telugu

(C) Dogri, Punjabi and Konkani

(D) Maithili, Gujarati and Bangla

**SHORT ANSWER QUESTIONS (3 MARKS)**

**1. "India is a land of linguistic diversity" Explain the statement.**

Answer:- India is a land of immense linguistic diversity, characterized by a vast array of languages and dialects. Historically, the Grierson survey identified 179 languages and 544 dialects. Today, the Constitution recognizes 22 Scheduled Languages, though hundreds of non-scheduled languages exist. A unique feature is the "linguistic continuum," where languages do not have rigid boundaries but instead overlap and merge at regional frontiers, reflecting a fluid cultural heritage rather than isolated pockets of speech.

**2. Analyse the main features of the composition of working population in India.**

Answer: The structure of India's workforce reflects a transition from traditional agrarian roots toward a modernized economy. Key characteristics include:

- **Economic Classification:** The population is divided into **Main Workers** (employed ≥183 days), **Marginal Workers** (<183 days), and **Non-workers**. The 2011 Census revealed that only **39.8%** are workers, leaving **60% as non-workers**, which indicates a high dependency ratio and underemployment.

- **Regional Variation:** Work participation rates vary from **29.1%** in Lakshadweep to **51.9%** in Himachal Pradesh. Higher participation is often seen in less developed areas where manual subsistence labor is a necessity.
- **Sectoral Dominance:** The **primary sector** remains the largest employer, involving **54.6%** of the workforce. However, a significant shift is occurring, with the **tertiary sector** ("Other Workers") rising to **41.6%**, while the secondary sector (household industries) remains small at **3.8%**.
- **Occupational Shifts:** There is a notable decline in agricultural dependence and a rise in **non-farm occupations**, particularly in urbanized regions like Delhi, reflecting the ongoing process of industrialization and urbanization.

**3. Analyse the major problems of youth population in India. Suggest two measures to overcome the problems.**

Ans: Major Problems of the Youth and Adolescent Population in India. The adolescent (10-19 years) and youth (15-29 years) populations face significant socio-economic and health challenges, including:

- Lower age at marriage,
- Illiteracy – particularly female illiteracy, school dropouts,
- Low intake of nutrients,
- High rate of maternal mortality of adolescent mothers,
- High rate of HIV and AIDS infections, physical and mental disability
- Retardedness, drug abuse and alcoholism, juvenile delinquency and commitence of crimes, etc.

Two Measures to Overcome These Problems

1. National Youth Policy (NYP-2014): This policy provides a holistic vision to empower youth to achieve their full potential and find their rightful place in the global community.
2. Skill Development and Entrepreneurship: Implementing the National Policy for Skill Development and Entrepreneurship (2015) to align skilling activities with common standards and link them to demand centres, making the youth more employable.

## LONG ANSWER QUESTION (5 MARKS)

**1. "The Female work participation rate is low in comparison to male in India." Explain the reason for this statement.**

**Ans.** Following are the reasons behind this:

- The patriarchal system of society does not allow females to work outside the house.
- Low level of literacy among females.
- The joint family system put greater family responsibility over females.
- Early child marriage, low level of nutrition, insecure atmosphere are the problems which results in low female participation in workforce.
- Wage disparity discourages women to participate in workforce.
- Harassment by fellow male workers.

**2. Discuss the challenges and strategies for managing population growth in India.**

**Ans:** India faces several challenges in managing its population growth, which requires comprehensive strategies:

**1. Challenges:**

**A. High Birth Rates:** Despite declining birth rates, certain regions in India still have high fertility rates, contributing to population growth.

**B. Poverty and Illiteracy:** High levels of poverty and illiteracy are linked to higher fertility rates, as impoverished and less educated populations may have limited access to family planning resources.

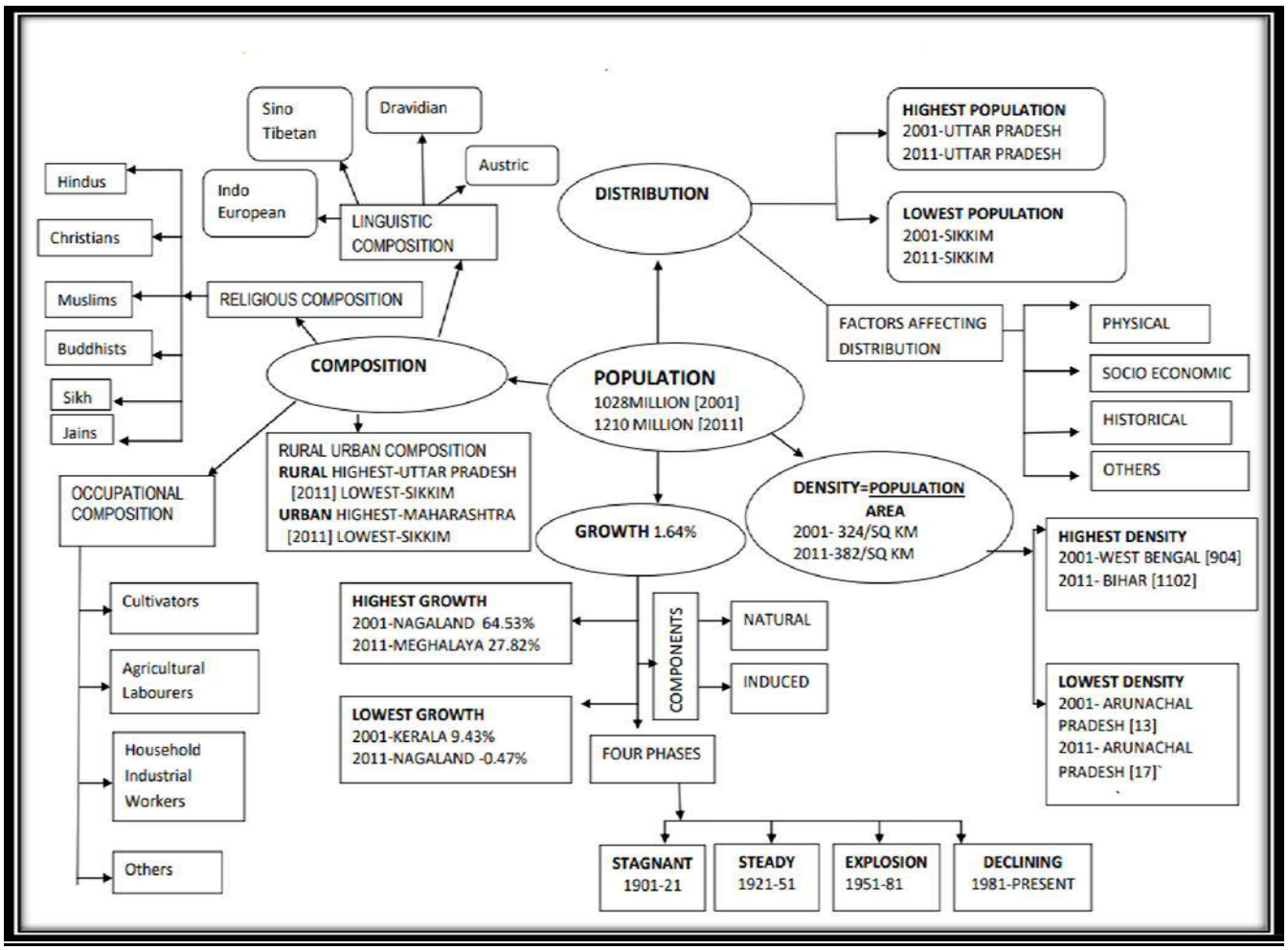
**C. Healthcare Access:** Inadequate healthcare facilities in rural and remote areas hinder efforts to manage population growth, as people lack access to reproductive health services and education.

**2. Strategies:**

**A. Family Planning Programs:** Strengthening family planning programs to ensure wider access to contraception, reproductive health education, and services can help manage population growth.

**B. Education and Awareness:** Enhancing education, particularly for women, is crucial. Educated women are more likely to make informed decisions about family size and reproductive health.

**C. Economic Development:** Improving economic conditions and reducing poverty can lead to lower fertility rates. Economic development provides better employment opportunities and reduces the economic necessity for larger families.




MCQ ANS 1) **B** 2) A

**UNIT-II WEIGHTAGE: 3 MARKS**

**CHAPTER-2: HUMAN SETTLEMENT**

**CHAPTER SUMMARY**

**1. Defining Settlements**

- **Definition:** A cluster of dwellings where human beings live, grouping people and apportioning territory as a resource base.

**2. Types of Rural Settlements**

Determined by physical features, cultural and ethnic factors, and security needs.

| Settlement Type | Clustered (Compact) | Semi-Clustered | Hamleted | Dispersed (Isolated) |
|---|---|---|---|---|
| **Key Characteristics** | 1. Houses are closely built with little space. | A large village becomes fragmented. One or more sections live slightly away from the main central cluster. | A large village is physically split into several smaller units that are separated but share the same name. | Features isolated huts or very small groups of huts. Farms or pastures are located on slopes between houses. |
| **Social Structure & Factors** | 1. Living areas are clearly separated from farms and pastures.<br>2.Often follow geometric shapes (rectangular, radial, linear). | Social segregation: Dominant land-owning communities occupy the center; lower strata/workers live on the outer flanks. | Motivated by social and ethnic factors. Units are locally called panna, para, palli, nagla, dhani, etc. | Caused by fragmented terrain and a scattered land resource base. |
| **Common Regions/Examples** | 1. Built for security/defense (Bundelkhand and Nagaland)<br>2. Scarcity of water (Rajasthan).<br>3. Fertile Alluvial plains, North-eastern states | Gujarat plains and parts of Rajasthan. | Middle and lower Ganga plains, Chhattisgarh, and lower Himalayan valleys. | Meghalaya, Uttarakhand, Himachal Pradesh, and Kerala. |

**3. Temporal classification of Indian Towns:**

- **Ancient Towns:** Over 2,000 years old, often religious/cultural centers (e.g., Varanasi, Prayagraj (Allahabad), Patna (Patliputra), Madurai).
- **Medieval Towns:** Fort towns acting as headquarters for kingdoms (e.g., Delhi, Hyderabad, Jaipur, Agra, Lucknow, Nagpur).
- **Modern Towns:** Developed by Europeans/British as ports (Surat, Goa, Daman, Pudducherry), administrative nodes (Mumbai, Chennai (Madras), Kolkata), or industrial centers (Jamshedpur), After Independence (Chandigarh, Bhubaneshwar, Durgapuir, Bhilai, Sindri).

**4. Functional Classification of Towns**

Cities are often identified by their dominant activity, though many become **multifunctional** as they grow.

- **Administrative:** Headquarters of government (e.g., New Delhi, Bhopal, Chandigarh, Shilong, Guwahati, Sri Nagar).
- **Industrial:** Driven by manufacturing (e.g. Modinagar, Jamshedpur, Bhilai, Salem).
- **Transport:** Hubs for export/import or inland transport (e.g., Deendayal Upadhyay Nagar, Kochi, Agra, Kozhikode,Vishakhapatnam).
- **Commercial:** Trade and commerce specialists (e.g., Kolkata, Saharanpur, Satna).
- **Mining:** Mineral-rich areas (Jharia, Raniganj, Digboi, Ankleshwar, Singrauli).

- **Garrison (Cantonment):** Military stations (Ambala, Jalandhar, Mhow, Babina, Udhampur).
- **Educational:** Major campus towns (e.g., Roorkee, Aligarh, Pilani).
- **Religious/Cultural:** Significant pilgrimage sites (e.g., Mathura, Amritsar, Puri, Haridwar).
- **Tourist:** Popular destinations (e.g., Nainital, Shimla, Ooty, Jaisalmer).

**5. Urbanization in India**

- **2011 Data:** Urbanisation level was **31.16%**.
- **Town Criteria (Census 1991):** The census of India, 1991 defines urban settlements as

1. All places which have municipality, corporation, cantonment board or notified town area committee.
2. A minimum population of 5000 persons
3. At least 75 per cent of male workers are engaged in non-agriculture pursuits.
4. A density of population of at least 400 persons per square kilometer.

## MULTIPLE CHOICE QUESTIONS (1 MARK)

**1**. Arrange the following categories of towns in a sequence order according to their historical development in India.

i. Jamshedpur ii. Bhilai iii. Madurai iv. Lucknow

Options:

A. i, iv, iii, ii B. iv, i ,iii, ii C. ii, iv, i, iii D. iii, iv, i, ii

**2. Which one of the following is the largest category of settlements in India?**

A. Rural settlements B. Urban settlements

C. Semi-urban settlements D. Metropolitan settlements

**3. Which one of the following towns is an example of a planned settlement?**

A. Varanasi B. Chandigarh

C. Jaipur D. Madurai

## SHORT ANSWER TYPE

**1. "Urban settlements often experience the phenomenon of "urban sprawl." Evaluate its impact on both the natural environment and socio-economic structures.**

**Answer: Environmental Impact-**

- Leads to deforestation and loss of biodiversity due to land conversion.
- Increases pollution levels as more vehicles are required for commuting.
- Strains natural resources like water and energy.

**Socio-economic Impact-**

- Creates unequal access to services like healthcare and education, especially in peripheral areas.
- Increases cost of living as infrastructure development lags.
- Reduces agricultural land, impacting food security.

**2 Differentiate between Rural Settlement and Urban Settlement.**

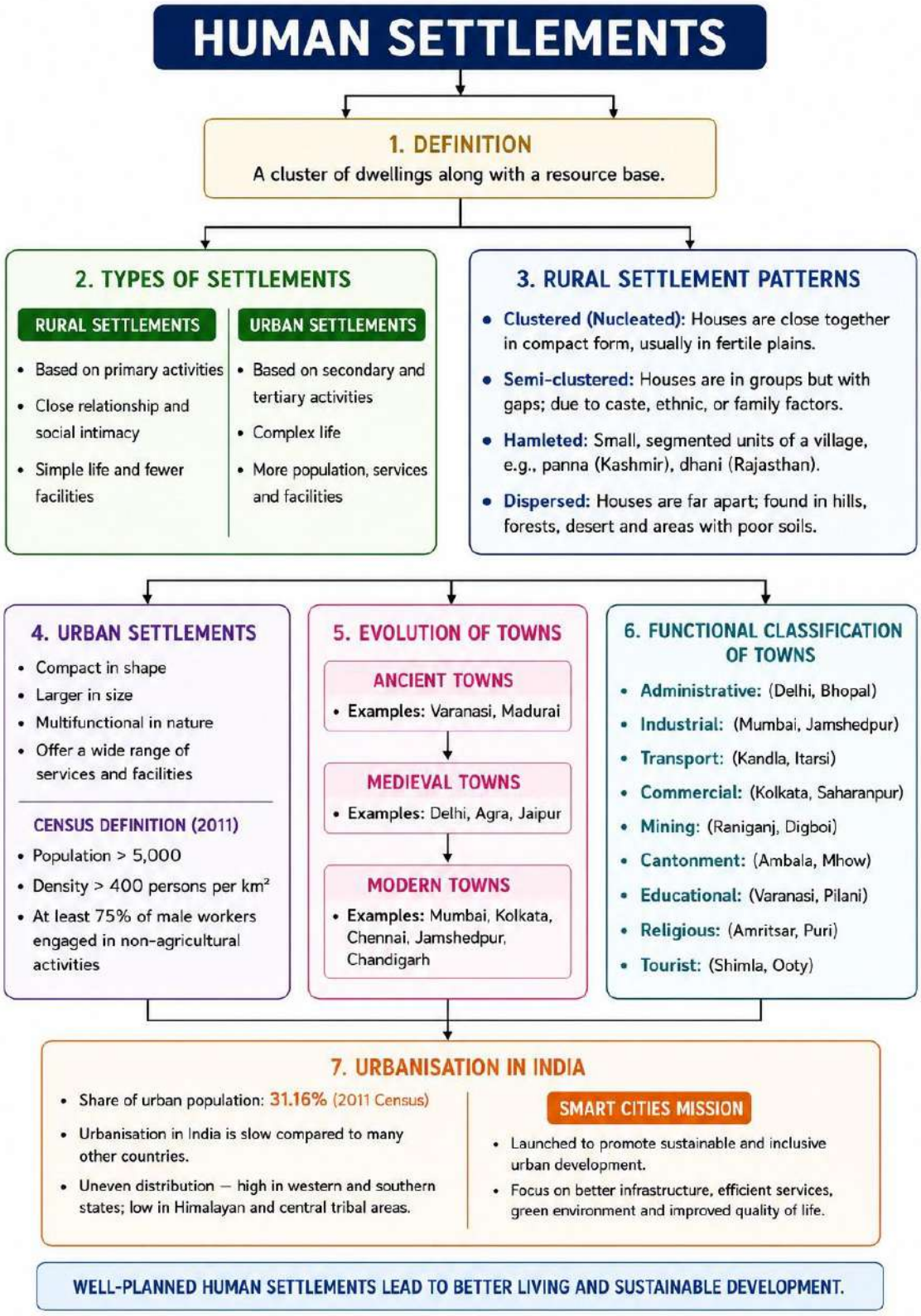
| Rural Settlements | Urban Settlements |
|---|---|
| People mainly depend on Agriculture and land-based work. | People depend on Manufacturing, Trade, and Services. |
| They provide food and raw materials to the cities. | They provide finished goods and specialized services to rural areas. |
| Social relations are intimate and personal because life is simple. | Social relations are formal and impersonal because life is fast and complex. |

## LONG ANSWER QUESTIONS (5 MARKS)

**1. Many of the modern towns in India were developed during the period of British domination". Substantiate the statement.**

**Answer:**

- The British had developed a number of the modern towns in India.
- Starting their foothold on coastal locations.
- First of all they developed some trading ports.
- Surat, Daman, Goa, Puducherry (Pondicherry) etc., were developed as trading centres.
- After that they consolidated their hold around three nodes. Mumbai (Bombay), Chennai (Madras) and Kolkata (Calcutta).
- They also developed their administrative centres, hill towns as summer resorts.
- They developed new civil administrative and military areas.
- Towns based on modern industries also evolved after 1850 such as Jamshedpur.




MCQs Ans: 1. D 2. A 3. B

## UNIT-III WEIGHTAGE: 10 MARKS

## CHAPTER-3: LAND RESOURCE AND AGRICULTURE

**Map Work**

Leading producing states of the following crops:

(a) Rice (b) Wheat (c) Cotton (d) Jute (e) Sugarcane (f) Tea (g) Coffee

**CHAPTER SUMMARY-**

## 1. Land Use Categories

Land use records are maintained by the Land Revenue Department.

- Forests: Area identified and demarcated by the government for forest growth.
- Non-agricultural Uses: Land for settlements, infrastructure, and industries.
- Net Area Sown (NSA): The physical extent of land on which crops are sown and harvested.

| | |
|---|---|
| **Current Fallow** | Left uncultivated for one or less than one agricultural year to recoup fertility. |
| **Fallow other than Current Fallow** | Left uncultivated for more than one year but less than five years. |
| **Culturable Wasteland** | Land left fallow for more than five years; can be reclaimed for cultivation |
| **Barren and Wastelands** | Land that cannot be brought under cultivation with available technology (e.g., deserts, hilly terrains). |

## 2. Common Property Resources (CPRs)

- Definition: Community-owned land where every member has access rights without private property rights.
- Importance: Provides fodder, fuel, and minor forest products; crucial for women and landless farmers.

## 3. Cropping Seasons in India

- Kharif (June–September): Tropical crops like rice, cotton, jute, and jowar.
- Rabi (October–March): Temperate crops like wheat, gram, and mustard.
- Zaid (April–June): Short-duration summer crops like watermelons, cucumbers, and fodder.

## 4.Types of Farming (Based on Moisture)

### 1. Irrigated Farming Classified by its objective:

- Protective Irrigation: Acts as a supplement to rainfall. Aim is to protect crops from moisture deficiency and cover the maximum possible area.
- Productive Irrigation: Aim is to achieve high productivity. It involves higher water input per unit of land compared to protective irrigation.

### 2. Rainfed Farming (Barani) Classified by soil moisture adequacy:

- Dryland Farming:
  - Practiced in regions with annual rainfall < 75 cm.
  - Crops: Hardy/drought-resistant (Ragi, Bajra, Gram, Guar).
  - Focus: Soil moisture conservation and rainwater harvesting.
- Wetland Farming:
  - Practiced where rainfall exceeds soil moisture needs.
  - Crops: Water-intensive (Rice, Jute, Sugarcane).
  - Features: Risk of floods/erosion; includes aquaculture.

## 5. Major Crops & Production

- Rice: Staple food; India is the world's 2nd largest producer. Leading states: West Bengal, UP, and Punjab.
- Wheat: Primarily a rabi crop of the temperate zone. Leading states: UP, MP, Punjab, and Haryana.
- Pulses: Rich in protein; legume crops that increase soil fertility via nitrogen fixation. Gram and Tur (Arhar) are major pulses.
- Oilseeds: Occupy 14% of cropped area; includes groundnut, rapeseed, and mustard.

- Fibre Crops: Cotton (tropical, semi-arid) and Jute (cash crop of West Bengal).

## 6. Agricultural Development & Challenges

- Green Revolution: Introduced in the mid-1960s;

| | | |
|---|---|---|
| Package Technology = HYV + Chemical Fertilizers + Irrigation = Food self-sufficiency<br>{HYV = High Yielding Variety} | **Wheat : Mexico**<br>**Rice : Philippines** | Punjab,Haryana,Western Uttar Pradesh, Andhra Pradesh, Gujarat |

### Major Problems of Indian Agriculture

- Dependence on Erratic Monsoon: Most of the cultivated land depends on unreliable rainfall, leading to droughts and floods.
- Low Productivity: Per hectare output and labor productivity are much lower compared to international levels (USA, Russia, Japan).
- Financial Constraints and Indebtedness: High costs of modern inputs lead small farmers into debt traps when crops fail.
- Lack of Land Reforms: Unequal distribution of land and poor implementation of reforms since independence.
- Small and Fragmented Landholdings: Shrinking farm sizes due to population pressure make farming uneconomic.
- Lack of Commercialisation: Many small farmers practice subsistence farming (growing only for their own family's consumption).
- Vast Underemployment: Seasonal unemployment where farmers lack work for 4 to 8 months of the year.
- Degradation of Cultivable Land: Loss of soil fertility due to alkalisation, salinisation, waterlogging, and excessive use of chemicals.

**MULTIPLE CHOICE QUESTIONS (1 MARK)**

**1. Which among them is correctly matched?**

| SL NO | GROUP | CROPS |
|---|---|---|
| 1 | PLANTATION | Sugarcane, Tea, Coffee |
| 2. | OILSEEDS | Mustard, Rapeseed, Jowar |
| 3. | PULSES | Gram, Tur, Groundnut |
| 4. | FIBRE | Cotton, Jute, Silk |

a. 1&3 b. 1&4 c. 2&4 d. 2&3

**2. Assertion- (A):** The contribution of agriculture has declined over time but the pressure on land for agriculture has not declined.

**Reason-(R):-** The number of people in India is increasing day by day.

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

B. Both A and R are true and R is the not correct explanation of A

C. A is true but R is false

D. A is false but R is true

**Q.3. Assertion (A):-** There are three varieties of tea i.e. Arabica, Robusta and Liberica.

**Reason (R):-** India mostly grows superior quality of coffee Arabia which is great demand in the international market.

a. Both A and R are true and R is the correct explanation of A.
b. Both A and R are true and R is the not correct explanation of A.
c. A is true but R is false.
d. A is false but R is true.

## LONG ANSWER QUESTION (5 MARKS)

**Q.1 The Green Revolution was not equally successful in all parts of India. Why?**

**Ans:** The Green Revolution was not equally successful in all parts of India due to following reasons:

- Irrigation facilities were limited only to Punjab, Haryana and Western U.P.
- Farmers were not aware of modern technology and its accessibility.
- Good and high yielding varieties of seeds were not easily available because of faulty distribution and storage system.
- Poverty of farmers.
- Small size of land holdings.
- Lack of investment capacity.

**Q.2 "Erratic monsoon" and 'Ineptness are the major problems of India agriculture.' Suggest and explain the measures to overcome these problems.**

**Ans:** Monsoon nature is very erratic in India. So, there should be more stress on developing various means of irrigation, especially in non-irrigated areas of India. Some of the measures are:

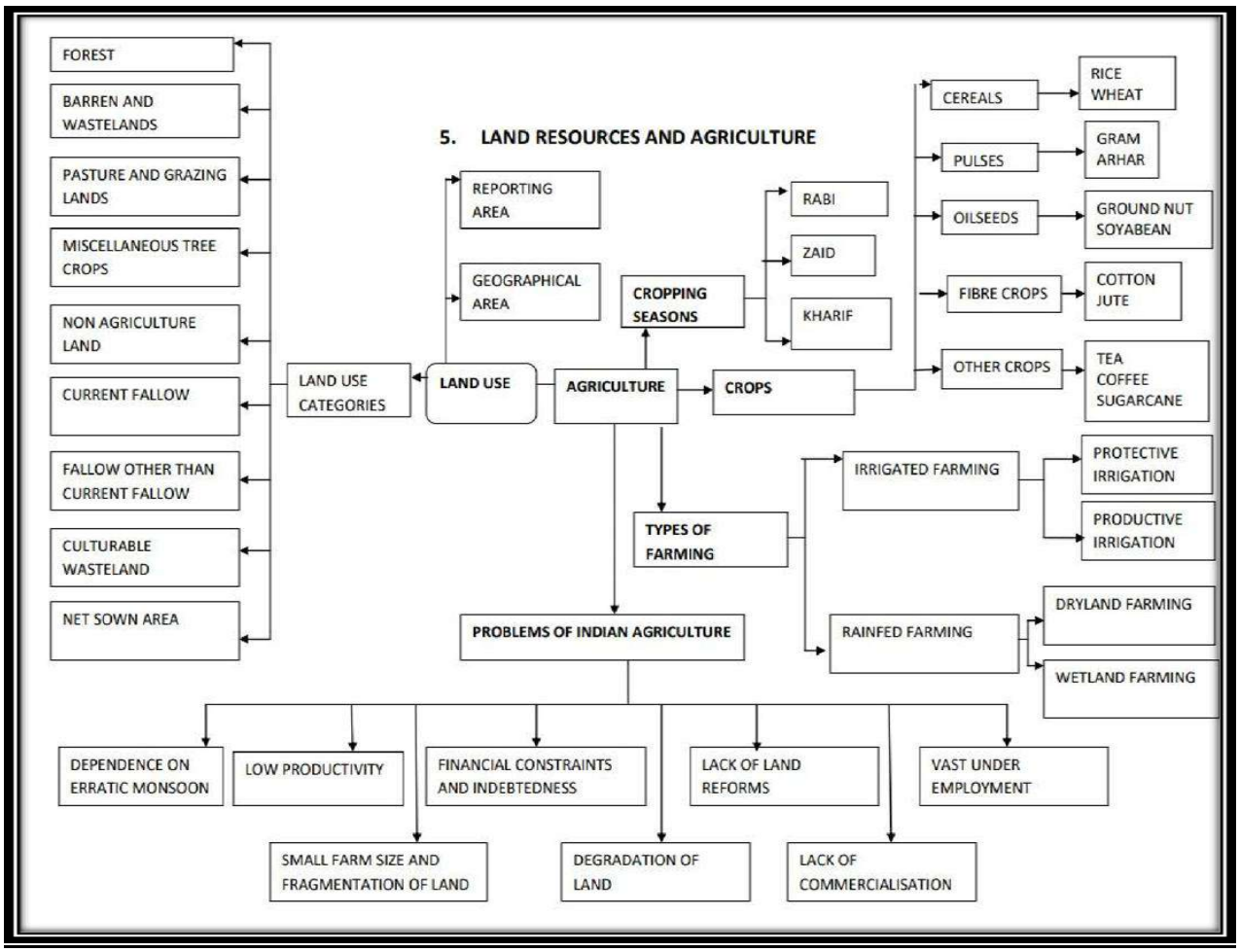
- There should be stress on rainwater harvesting techniques to improve and recharge groundwater tables.
- Drought-resistant crops should be used more in the areas where a shortage of water occurs.

**To overcome the problem of indebtedness following measures could be taken:**

- Encouraging cooperative credits in rural areas so that farmers could get loans at cheaper rates. Private lending should be eliminated.
- Agriculture should be conducted on a scientific basis so that the income of the farmers would increase.
- Encourage a minimum support price policy for all farmers. Rural banks and co- operative banks rates.

**Q3. If you are a farmer of India, which all problems will you face in Indian agriculture?**

**Ans.** 1. Uneven and unreliable rainfall 2. Low productivity 3. Poverty of the farmers 4. Lack of land reforms
5. Fragmentation of land holdings 6. Lack of commercialization 7. Vast under employment
8. Degradation of cultivable land 9. Illiteracy of the farmers.




MCQs Ans 1. D 2. A 3. C

## CHATER-4: WATER RESOURCES

### CHAPTER SUMMARY

1. India accounts - 2.45% of world surface area
- 4% of world water resource
- 16% of population

### SURFACE WATER RESOURCES-

Major sources of surface water: i) River, ii) Lakes iii) Ponds iv) Tanks

### GROUND WATER RESOURCES-

Groundwater is a vital "replenishable" resource, but its usage is alarmingly uneven across India.

**Levels of Utilisation:**

- **Very High:** Punjab, Haryana, Rajasthan, and Tamil Nadu (risking depletion).
- **Moderate:** Gujarat, Uttar Pradesh, Bihar, Maharashtra.
- **Low:** Chhattisgarh, Odisha, Kerala (high untapped potential).

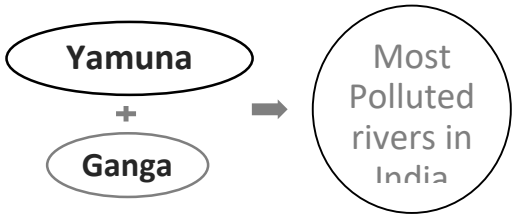
** Continuous over-exploitation leads to social upheaval, environmental degradation, and stunted development.

### WATER UTILIZATION-

Surface water: - 1. Agriculture = 89% domestic = 9% industrial 2%
Ground Water Resources: Agriculture = 92% industrial = 5 domestic = 3%

| REASONS FOR INCREASED DEMAND FOR IRRIGATION- | DETERIORATION OF WATER QUALITY- |
|---|---|
| 1. Uneven distribution of rainfall | 1. Dwindling per-capita water availability. |
| 2. Seasonal rainfall | 2. Rapidly increasing population. |
| | 3. Rising standards of living. |

| | |
|---|---|
| 3. High temperature causes more evaporation.<br>4. To grow water intensive crops<br>5. To increase production<br>6. Dry-Season Farming<br>7. Provides the consistent, controlled water supply required by High-Yielding Variety (HYV) seeds. | 4. Widespread groundwater pollution.<br>5. Urban and industrial waste discharge into rivers.<br>6. Cultural activities increasing river waste. |




| Sr. No. | River | Most Polluted Location / Stretch |
|---|---|---|
| 1 | Yamuna | Between Delhi and Etawah |
| 2 | Ganga | Kanpur and Varanasi |
| 3 | Sabarmati | Ahmedabad |
| 4 | Gomti | Lucknow |
| 5 | Musi | Hyderabad |
| 6 | Vaigai | Madurai |

**WATER CONSERVATION AND MANAGEMENT**

1. Conserve and manage freshwater for sustainable development.
2. Enact quick policies and legal frameworks.
3. Adopt water-saving technologies and methods.
4. Prevent water pollution.
5. Encourage **watershed** development.
6. Promote rainwater harvesting.
7. Implement recycling, reuse, and conjunctive water use.

**::LEGISLATIVE PROVISIONS ::**

1. THE WATER (PREVENTION AND CONTROL OF POLLUTION) ACT, 1974
2. THE ENVIRONMENT PROTECTION ACT, 1986
3. THE WATER CESS ACT, 1977

**REASONS OF WATER POLLUTION**

1. Water quality degrades in plains due to intensive human use.
2. Pollution stems from agricultural, domestic, and industrial waste.
3. Summer flow reduction spikes pollutant concentrations.
4. Organic and bacterial contamination are primary issues.
5. Groundwater suffers from toxic metal and fluoride infiltration.
6. Legislative acts remain poorly implemented.
7. Public awareness is vital for reduction.

**WATER SHED MANAGEMENT-**

- Watershed management includes conservation, regeneration and judicious use of all resources – natural (like land, water, plants and animals) and human with in a watershed.
- Watershed management basically refers to efficient management and conservation of surface and groundwater resources. It involves prevention of runoff and storage and recharge of groundwZA09ater through various methods like percolation tanks, recharge wells, etc.

| **Project Name** | **Location/Sponsor** | **Key Features** |
|---|---|---|
| **Haryali** | Central Government | Executed by **Gram Panchayats**; focuses on drinking water, irrigation, fisheries, and afforestation. |
| **Neeru-Meeru** (Water and You) | **Andhra Pradesh** | Community-led construction of percolation tanks and check dams. |

| | | |
|---|---|---|
| **Arvary Pani Sansad** | Alwar, **Rajasthan** | Built *Johads* (dug-out ponds) and check dams through people's participation. |

| **Region** | **Impact of Over-Withdrawal** |
|---|---|
| Punjab & Haryana | Drastic decline in the groundwater table. |
| Rajasthan & Maharashtra | Increased Fluoride concentration in water. |
| West Bengal & Bihar | Increased Arsenic concentration in groundwater. |

- **Rainwater Harvesting:**

  Captures and stores rainwater for direct use or groundwater recharge.

  **Eco-Friendly Technique:** A low-cost method using borewells, pits, and wells to preserve water.

  **Groundwater Benefits:** Recharges aquifers, raises the water table, and dilutes contaminants like fluoride.

  **Environmental Protection:** Prevents soil erosion, flooding, and saltwater intrusion in coastal regions.

  **Traditional Methods:** Utilizes rural storage like lakes and ponds, or Rajasthan's specialized "Kunds" and "Tankas."

  **Urban Application:** Rooftop harvesting reduces city dependence on overstretched municipal supplies.

  **Energy Efficiency:** Higher water tables reduce the energy required to pump groundwater.

  Other remedies like river inter-linking, desalination, and water pricing.

**Tamil Nadu has made water harvesting structures in the houses compulsory**

## MULTIPLE CHOICE QUESTIONS (1 MARK)

**Q1. What is the negative impact of intensive irrigation in the states of Punjab, Haryana and Western Uttar Pradesh?**

(A) Increasing salinity in the soil
(B) Increasing soil erosion
(C) Soil become alkaline
(D) Decreasing of soil fertility

## SHORT ANSWER QUESTIONS (3 MARKS)

**Q2. "Rainwater harvesting technique is environment-friendly as well as cost effective for people". Justify this statement.**

**Answer:** The economic and social values of rainwater harvesting are given below:

- Rainwater harvesting technique is environment-friendly as well as cost effective for people.
- This technique guides to store rainwater into bore wells, pits, etc. for future use and in times of scarcity of water.
- It creates sensitivity and awareness among people about the benefits of conservation and reuse of water.

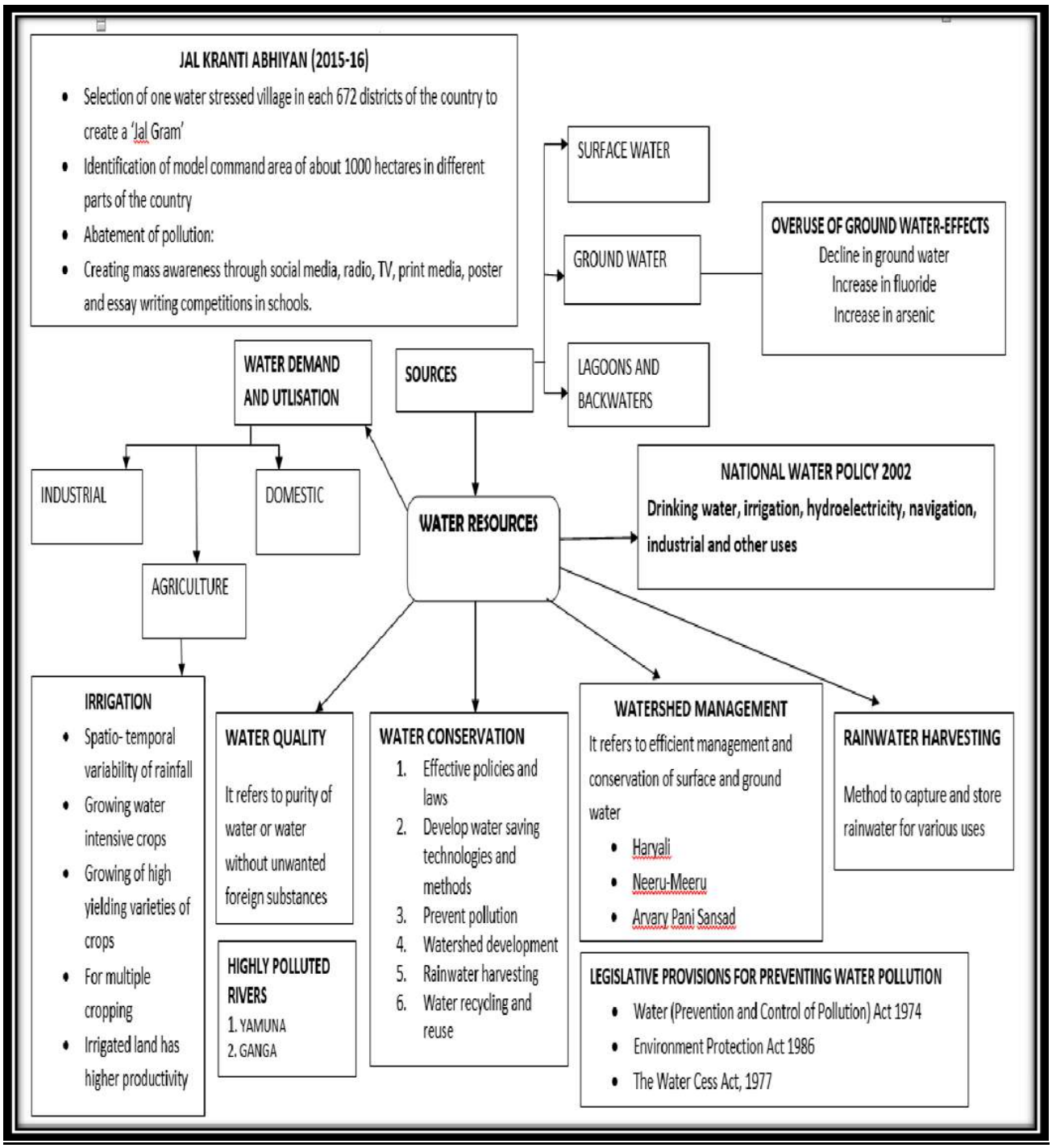
## LONG ANSWER QUESTION (5 MARKS)

**Q1. The depleting water resources may lead to social conflicts and disputes. Elaborate it with suitable examples?**

**Answer:** Water is a cyclic resource with abundant supplies on the globe. Approximately, 71 per cent of the earth's surface is covered with it but freshwater constitutes only about 3 per cent of the total water. In fact, a very small

proportion of freshwater is effectively available for human use. The availability of freshwater varies over space and time. The tensions and disputes on sharing and control of this scarce resource are becoming contested issues among communities, regions, and states.

- The sharing of waters of rivers of Punjab, Haryana, and Himachal Pradesh is a contesting issue.
- Since long, the dispute is going on between Tamil Nadu and Karnataka over the waters of Kaveri River.
- The sharing of waters of Narmada Basin is a dispute between the states of Maharashtra, Madhya Pradesh and Gujarat.


JAL KRANTI ABHIYAN (2015-16)
Selection of one water stressed village in each 672 districts of the country to create a 'Jal Gram'
Identification of model command area of about 1000 hectares in different parts of the country
Abatement of pollution:
Creating mass awareness through social media, radio, TV, print media, poster and essay writing competitions in schools.
SURFACE WATER
GROUND WATER
OVERUSE OF GROUND WATER-EFFECTS
Decline in ground water
Increase in fluoride
Increase in arsenic
WATER DEMAND AND UTLISATION
SOURCES
LAGOONS AND BACKWATERS
INDUSTRIAL
DOMESTIC
AGRICULTURE
WATER RESOURCES
NATIONAL WATER POLICY 2002
Drinking water, irrigation, hydroelectricity, navigation, industrial and other uses
IRRIGATION
Spatio- temporal variability of rainfall
Growing water intensive crops
Growing of high yielding varieties of crops
For multiple cropping
Irrigated land has higher productivity
WATER QUALITY
It refers to purity of water or water without unwanted foreign substances
HIGHLY POLLUTED RIVERS
1. YAMUNA
2. GANGA
WATER CONSERVATION
1. Effective policies and laws
2. Develop water saving technologies and methods
3. Prevent pollution
4. Watershed development
5. Rainwater harvesting
6. Water recycling and reuse
WATERSHED MANAGEMENT
It refers to efficient management and conservation of surface and ground water
Haryali
Neeru-Meeru
Arvary Pani Sansad
RAINWATER HARVESTING
Method to capture and store rainwater for various uses
LEGISLATIVE PROVISIONS FOR PREVENTING WATER POLLUTION
Water (Prevention and Control of Pollution) Act 1974
Environment Protection Act 1986
The Water Cess Act, 1977

MCQs Ans 1. A

# CHAPTER-05: MINERALS AND ENERGY RESOURCES

## Map Work

**Mines:**

**Iron-ore mines**: Mayurbhanj, Bailadila, Ratnagiri, Bellary
**Manganese mines**: Balaghat, Shimoga
**Copper mines**: Hazaribagh, Singhbhum, Khetari
**Bauxite mines**: Katni, Bilaspur and Koraput
**Coal mines**: Jharia, Bokaro, Raniganj, Neyveli
**Oil Refineries**: Mathura, Jamnagar, Barauni

## CHAPTER SUMMARY

- **Mineral:** The term mineral is defined as natural occurring organic and inorganic substance having definite chemical composition and specific physical property.
- Classification of Minerals-

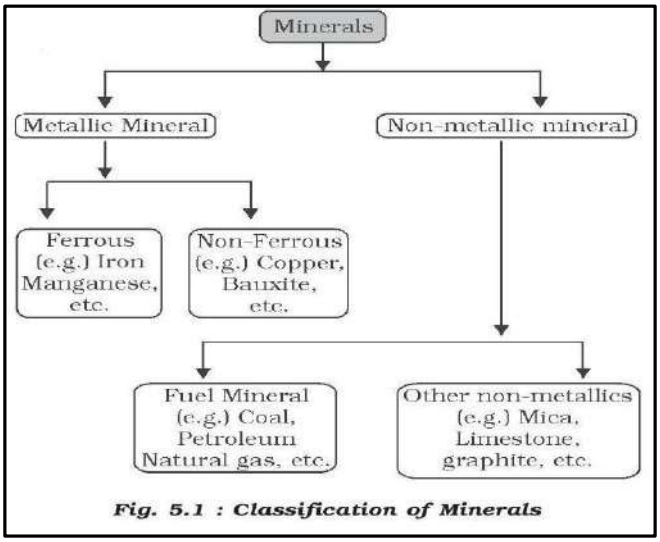


*Fig. 5.1 : Classification of Minerals*

## Characteristics of Minerals Resources-

- Uneven Distribution: These are unevenly distributed over space.
- Inverse Quality-Quantity Relationship: Good quality minerals are less in quantity, while low quality minerals are more abundant.
- Exhaustibility: Minerals are finite and take millions of years to form.

## FERROUS MINERALS

### A) Iron Ore:

Iron ore is the "backbone" of the **metallurgical industry**. India is extremely fortunate to have the largest reserve of iron ore reserves in Asia.

The Two Main Types of Iron Ore : Haematite, Magnetite.

| State | Important Districts / Regions | State | Important Districts / Regions |
|---|---|---|---|
| Odisha | Sundergarh, **Mayurbhanj**, Kendujhar | Andhra Pradesh | Kurnool, Cuddapah, Anantapur |
| Jharkhand | Pashchimi and Poorbi Singhbhum | Tamil Nadu | Salem, Nilgiris |

| | | | |
|---|---|---|---|
| Chhattisgarh | Durg, Dantewara, **Bailadila** | Maharashtra | Chandrapur, Bhandara, **Ratnagiri** |
| Telangana | Karimnagar, Warangal | Karnataka | **Ballari**, Chikkamagaluru, Shivamogga, Chitradurga, Tumakuru |

**B) Manganese**

i)Manganese is an important raw material for smelting of iron ore.

ii) Madhya Pradesh and Odisha are the leading producers of Manganese.

iii) Important Mines : - Balaghat (M.P.), Shimoga (Karnataka)

**Non-Ferrous Minerals**

**A) Bauxite:**

- Bauxite is the ore, which is used in manufacturing of aluminium.
- **Odisha happens to be the largest producer of Bauxite.**
- **Katni(Madhya Pradesh), Bilaspur(Chattisgarh) and Koraput (Odisha)**

**B) *Copper***

- Copper is an indispensable metal in the electrical industry for making wires, electric motors, transformers and generators.
- **It is alloyable, malleable and ductile.**
- It is also mixed with gold to provide strength to jewellery.
- **Hazaribagh(Jharkhand), Singhbhum(Jharkhand), Khetari (Rajasthan)**

**Important Nuclear Power Plants**

**Tarapur:** Maharashtra (1st in India).

**Rawatbhata:** Rajasthan

**Kalpakkam:** Tamil Nadu.

**Narora:** Uttar Pradesh.

**Kaiga:** Karnataka.

**Non-metallic Minerals:-**

***A) Mica***

Mica is mainly used in the electrical and electronic industries.

**It can be split into very thin sheets which are tough and flexible.**

**Energy Resources:**

**Conventional energy:**

- The energy sources that once exhausted, do not replenish themselves within a specific period.
- Mineral fuels like coal, petroleum and natural gas (known as fossil fuels), ***nuclear energy*** minerals, are the conventional sources of energy.

**Coal-**

- It is found in two rock sequences i.e. Gondwana coal fields and tertiary coal fields.
- **Gondwana Coal Fields-**
  - 1.Damodar Valley, Jharkhand and West Bengal have the entire area of this coal field. **Jharia** (largest coal field, Jharkhand), **Raniganj** (second fields largest, West Bengal), **Bokaro (Jharkhand)**.
  - Tertiary Coal Fields- It occur in Assam, Arunachal Pradesh, Meghalaya and Nagaland.
- About 80 per cent of the coal deposits in India is of **bituminous type** and is of non-coking grade.
- the brown coal or **lignite** occur in the coastal areas of Tamil Nadu **(Neyveli).**

**Petroleum-**

- Crude oil is found in sedimentary rocks of tertiary age.
- By-products :- fertiliser, synthetic rubber, synthetic fibre, medicines, Vaseline, lubricants, wax, soap and cosmetics.

●Petroleum is referred to as ***liquid gold*** because of its scarcity and diversified uses.

●Important oil producing area are Digboi, Naharkatiya (Assam). Ankaleshwar (Gujarat), Mumbai High.

●Important Oil Refineries – Jamnagar (Gujarat), Mathura (U.P.), Barauni (Bihar).

●There are two types of oil refineries:

▪ **Field-based:** Located near the oil source (e.g., **Digboi**).

▪ **Market-based:** Located near the consuming market (e.g., **Barauni**).

***Natural Gas***

Natural Gas is found with petroleum deposits.
GAIL in India is responsible for transport, process, and market natural gas.

● **Non- Conventional energy**

1. Equitably distributed
2. Environment-friendly.
3. More sustained
4. Cheaper energy after the initial cost is taken care of.

●Eg: Solar, Wind, Tidal & Wave, Geothermal, Bio energy etc.

| Source | Key Information | Potential Areas |
|---|---|---|
| **Solar Energy** | Tapped via Photovoltaic cells. More effective than coal/nuclear. | **Gujarat & Rajasthan** (Western India). |
| **Wind Energy** | Kinetic energy of wind converted via turbines. Pollution-free. | Rajasthan, Gujarat, Maharashtra, Karnataka. |
| **Tidal Energy** | Energy from ocean currents and waves. | West Coast of India (High potential, under-utilized). |

** A geothermal energy plant has been commissioned at **Manikaran in Himachal Pradesh**.
** Project converting municipal waste into energy is Okhla in Delhi.

## MULTIPLE CHOICE QUESTIONS

**1. Which one of the following states is the largest producer of bauxite in India?**

A. Jharkhand
B. Odisha
C. Gujarat
D. Maharashtra

**2. Which one of the following is a non-conventional source of energy?**

A. Coal
B. Petroleum
C. Solar energy
D. Natural gas

## SHORT QUESTIONS (3 MARKS)

**1. "The potential of wind energy is abundant in Indian" Write your statement in terms of advantages and development.**

1. Wind energy is a clean fuel source.
2. It does not pollute the air as compared to conventional sources.
3. Wind power is one of the lowest-cost renewable energy technologies available today.
4. Even without government subsidies, wind power is a low-cost fuel in many areas of the country.

Four wind power producing states of India are: 1. Rajasthan 2. Gujarat 3. Maharashtra 4. Karnataka.

**2. "Explain the importance of solar energy in the Indian context" ?**

Ans:- 1. As a tropical country, India has vast solar potential. The western regions, specifically Gujarat and Rajasthan, receive high solar radiation.

2. It is easy to construct and maintain in remote areas.
3. It reduces the reliance on traditional firewood and promotes decentralized energy growth.

## LONG ANSWER QUESTIONS (5 MARKS)

**1. "The promotion of the use of non-conventional sources of energy in India is the need of the hour". Support this statement.**

**Ans:** 1. **Renewable and Inexhaustible:** Unlike fossil fuels, non-conventional sources like solar, wind, and tidal energy are sustainable and will never run out.

2. **Environment Friendly:** These energy sources are clean and pollution-free, which helps in protecting the environment and reducing global warming.

3. **High Efficiency:** Solar energy is significantly more effective than traditional plants—it is **7% more effective than coal** and **10% more effective than nuclear plants**.

4. **Rural Development:** These sources are easy to set up in remote areas and are very useful for rural appliances like solar cookers, heaters, and crop dryers.

5. **Energy Security:** India is a tropical country with huge potential (especially in **Gujarat and Rajasthan**); using these resources reduces our dependence on expensive and scarce mineral fuels.

**2. "Bio-energy can play a significant role in reducing India's dependence on fossil fuels." Explain this statement.**

**Ans:** Bio energy refers to energy derived from biological products which include agricultural residues, along with municipal, industrial and other works.

**Advantages:**

- It can be converted into electrical energy, heat energy or gas for cooking.
- It will improve economic life of rural area in developing countries like India.
- It can process waste to produce energy.
- It reduces environment pollution.

**3. "Various types of minerals are concentrated in few areas of the country" Justify the statement through distributional pattern of minerals.**

**Ans:** Following three major mineral belts can be demarcated.

India's minerals are primarily concentrated in three main belts:

**A. The North-Eastern Plateau Region**

a. Chhotanagpur (Jharkhand), Odisha, West Bengal, and parts of Chhattisgarh.
b. Minerals: Iron ore, Coal, Manganese, Bauxite, Mica.

**B. The South-Western Plateau Region**

a. Karnataka, Goa, Tamil Nadu uplands, and Kerala.
b. Minerals: High-grade Iron ore, Manganese, Limestone, and Bauxite.
c. **Neyveli: Known for Lignite (Brown Coal).
d. **Kerala: Monazite and Thorium (Atomic minerals).

**C. The North-Western Region**

a. Aravali range (Rajasthan) and parts of Gujarat.
b. Minerals: Copper and Zinc (Dharwar rock system).
c. Rajasthan: Building stones (Sandstone, Granite, Marble) and Gypsum.
d. Gujarat: Petroleum (Oil) and Salt.

**Other region:**

a. Upper Brahmaputra valley is significant petroleum-producing area.
b. The Himalayan belt for Copper, Lead, Zinc, Cobalt and Tungsten.

**4. "Conservation of minerals is more important than other resources". Explain.**

**Ans:**

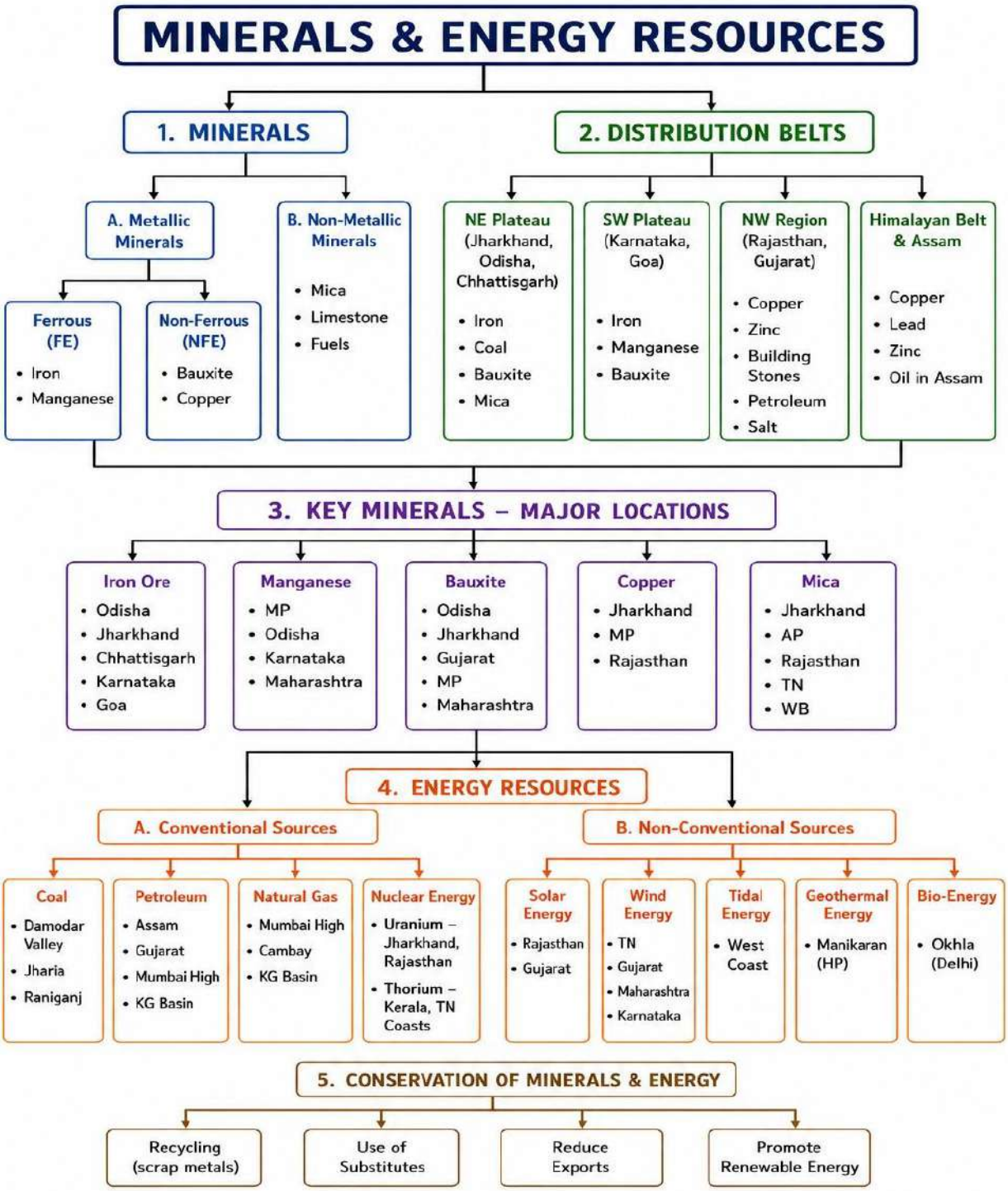
- Minerals are important to conserve as industries and agriculture are dependent completely on minerals.

- We are rapidly consuming mineral resources that require millions of years to be renewed.
- Workable minerals are in insufficient quantities.
- Due to a decrease in good quality and they come from great depths, the costs of mineral extraction are increasing.
- Economic and industrial development depends on minerals.

**5. "Suggest any five measures for the conservation of mineral resources in India and explain them"**

**Ans: Measures for the Conservation of Mineral Resources:**

- Use of Advanced Technology: Adopting modern mining methods to reduce waste and allow the efficient use of low-grade ores.
- Recycling of Metals: Promoting the use of scrap metal (especially copper, lead, and zinc) to reduce the demand for fresh mining.
- Switching to Alternatives: Using renewable energy sources like solar and wind as a substitute for exhaustible fossil fuels like coal.
- Finding Substitutes: Developing alternative materials (like plastics or ceramics) to replace scarce minerals and lower their consumption.
- Export Regulation: Reducing the export of strategic and scarce minerals to ensure they are available for domestic use for a longer period.

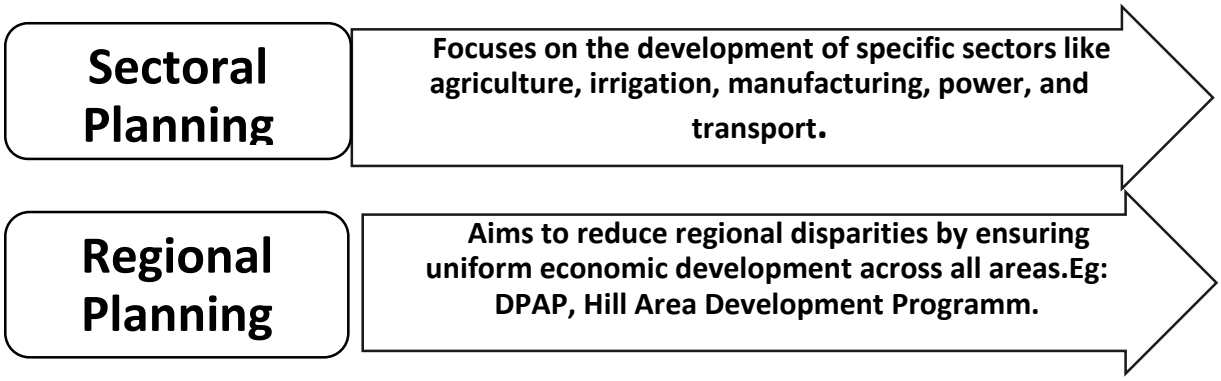



**MCQs Ans 1. B 2. C**

## CHAPTER-06: PLANNING AND SUSTAINABLE DEVELOPMENT IN INDIAN CONTEXT

### CHAPTER SUMMARY

- On 1 January 2015, the Planning Commission was replaced by the NITI Aayog.
- NITI Aayog has been with the objective of involving the states in economic policy making for India for providing strategic and technical advice to the Central and State governments.
- Generally, there are two approaches to planning, i.e. Sectoral planning and regional planning.




•

| Approach | Key Programmes |
|---|---|
| Target Area | 1. Hill Area Development<br>2. Drought Prone Area<br>3. Desert Development<br>4. Command Area Development Programme |
| Target Group | 1. SFDA (Small Farmers Development Agency)<br>2. MFDA (Marginal Farmers Development Agency) |

**Case Study: ITDP in Bharmaur Region**

- Location: Bharmaur and Holi tehsils, Chamba District, Himachal Pradesh.
- Notified Tribal Area since 21 November 1975.
- Gaddi Tribal Community.
  - Speak Gaddiali dialect.
  - Traditionally practiced Transhumance (seasonal movement with livestock).
- Challenges: Harsh climate, fragile environment, low resource base, and historical isolation.

**Planning Strategy (ITDP)**

- Year Started: 1970s (Gaddis gained 'Scheduled Tribe' status).
- Introduced under the Tribal Sub-Plan (1974) during the **5th FYP**.
- Key Priorities:

1. Infrastructure Development: Transport, Communication, and Electricity.
2. Basic Needs: Potable water and healthcare.
3. Development of Social and Community services.

**Impact of the Development Plan**

**A. Social Achievements:**

The most dramatic changes were seen in the social fabric of the Gaddi society.

| Indicator | Pre-ITDP (1971) | Post-ITDP (2011) |
|---|---|---|
| Female Literacy | 1.88% | 65% |
| Gender Inequality | Very High | Significantly Declined |
| Social Issues | High Child Marriage | Decline in Child Marriage |

| | | |
|---|---|---|
| Health | Poor Access | Improved Healthcare & Sex Ratio |

## B. Economic Achievements (The Shift)

**The economy transitioned from purely subsistence to a more modern mix.**

- Increase in cultivation of pulses and other commercial crops.

Subsistance Farming  Cash Crops

- Decline in Pastoralism

## Sustainable Development

As industrial development caused environmental damage, new ideas emerged to warn the world.

1. 1968: *'The Population Bomb'* by Ehrlich.
2. 1972: *'The Limits to Growth'* by Meadows.
3. The Brundtland Commission :- The United Nations established the World Commission on Environment and Development (WCED), headed by Gro Harlem Brundtland.

Report Name: *'Our Common Future'* (1987).

"Development that meets the needs of the present without compromising the ability of future generations to meet their own needs."

## Case Study: Indira Gandhi Canal (Nahar) Command Area

Former Name: Rajasthan Canal.
Conceived By: Kanwar Sain (1948).
Launched: 31 March 1958.
Origin: Harike Barrage, Punjab.
Location: Runs parallel to the Pakistan border in the Thar Desert (Marusthali).
Total Length: 9,060 km.

Two Methods of Water Flow

The canal uses two different systems based on the slope of the land:

| System | Location | How it Works |
|---|---|---|
| Flow System | Right Bank | Water flows naturally with the slope of the land. |
| Lift System | Left Bank | Water is lifted up mechanically to flow against the slope. |

### Stages of Construction

The project was divided into two distinct geographical and temporal stages:

Stage-I
Districts: Ganganagar, Hanumangarh, and Northern Bikaner.
Topography: Gently undulating land.
Started: Early 1960s.

Stage-II
Districts: Bikaner, Jaisalmer, Barmer, Jodhpur, Nagaur, and Churu.
Topography: Harsh desert, shifting sand dunes, temperatures up to 50°C.
Started: Mid-1980s.

### Impact of the Canal (The Transformation)

The introduction of water transformed the Ecology, Economy, and Society of the Thar Desert.

### A. Positive Impacts (Greening the Desert)

Ecological: Increased soil moisture, extensive afforestation, and pasture development.
Geological: Reduction in wind erosion and stabilization of sand dunes.
Economic: Massive increase in agricultural and livestock productivity.

### B. Agricultural Shift (Crop Change)

The canal changed what farmers grow:
Traditional (Old): Gram, Bajra, Jowar (Drought-resistant).
Modern (New): Wheat, Cotton, Groundnut, Rice (Water-intensive).

### C. Negative Impacts (Environmental Cost)

Intensive irrigation without proper drainage has led to "Twin Problems":
Waterlogging: Excess water saturating the soil.
Soil Salinity: Salt rising to the surface, making the land infertile.

## MCQ

**1. Which one of the following is a multi-level planning approach adopted in India?**

A. District planning B. Village planning
C. Block planning **D. All of the above**

**2. Which one of the following is a sustainable development project in India?**

**A. Indira Gandhi Canal Command Area Project**
B. Hirakud Dam Project
C. Jawahar Rozgar Yojana
D. Narmada Valley Project

## SHORT ANSWER QUESTIONS (3 MARKS)

**1. "Many area of our country are resource rich region but remain backward". Which type of planning process help to overcome this situation?**

**Ans.**

- The planning commission introduces the target area and target group approaches to reduce the regional and social disparity.
- In these approaches planners take special care of those areas or groups which have remained economical backward.
- Command area development programme, Desert development programme, Hill area development programme are include in Target area programme.

**2. Explain the meaning of 'target area planning' and its need for development.**

**Ans:** This approach focuses on developing specific areas that have remained economically backward despite having a resource base. It introduces special schemes to arrest the widening gap of regional and social disparities.

- **Need for Development:**
  - Resource Paradox: Even resource-rich regions can remain backward without proper technology and investment.
  - Reducing Imbalance: It is necessary to prevent regional imbalances from getting more accentuated over time.
  - Specific Challenges: General planning may not address the unique needs of areas like drought-prone zones or hill regions.

**3. "Indira Gandhi Canal contributed to agricultural development in Rajasthan" Explain.**

**Ans:**

- The canal has converted arid desert land into fertile agricultural fields, enabling the cultivation of crops like wheat, cotton, and mustard, and improving food security and rural livelihoods.

- One environmental issue is soil salinization, which occurs due to excessive irrigation and poor drainage, reducing soil fertility over time.
- Problems like waterlogging and salinity can be managed through proper drainage systems, controlled irrigation techniques, and the use of salt-tolerant crops.
- Planning according to natural conditions helps to avoid ecological damage, ensures sustainable water use, and maintains the long-term productivity of the land.

## LONG ANSWER QUESTIONS (5 MARKS)

**1. 'Hill area development programmes in India are drawn keeping in view their topographical, ecological, social and economic conditions'. Support this statement with suitable explanation.**

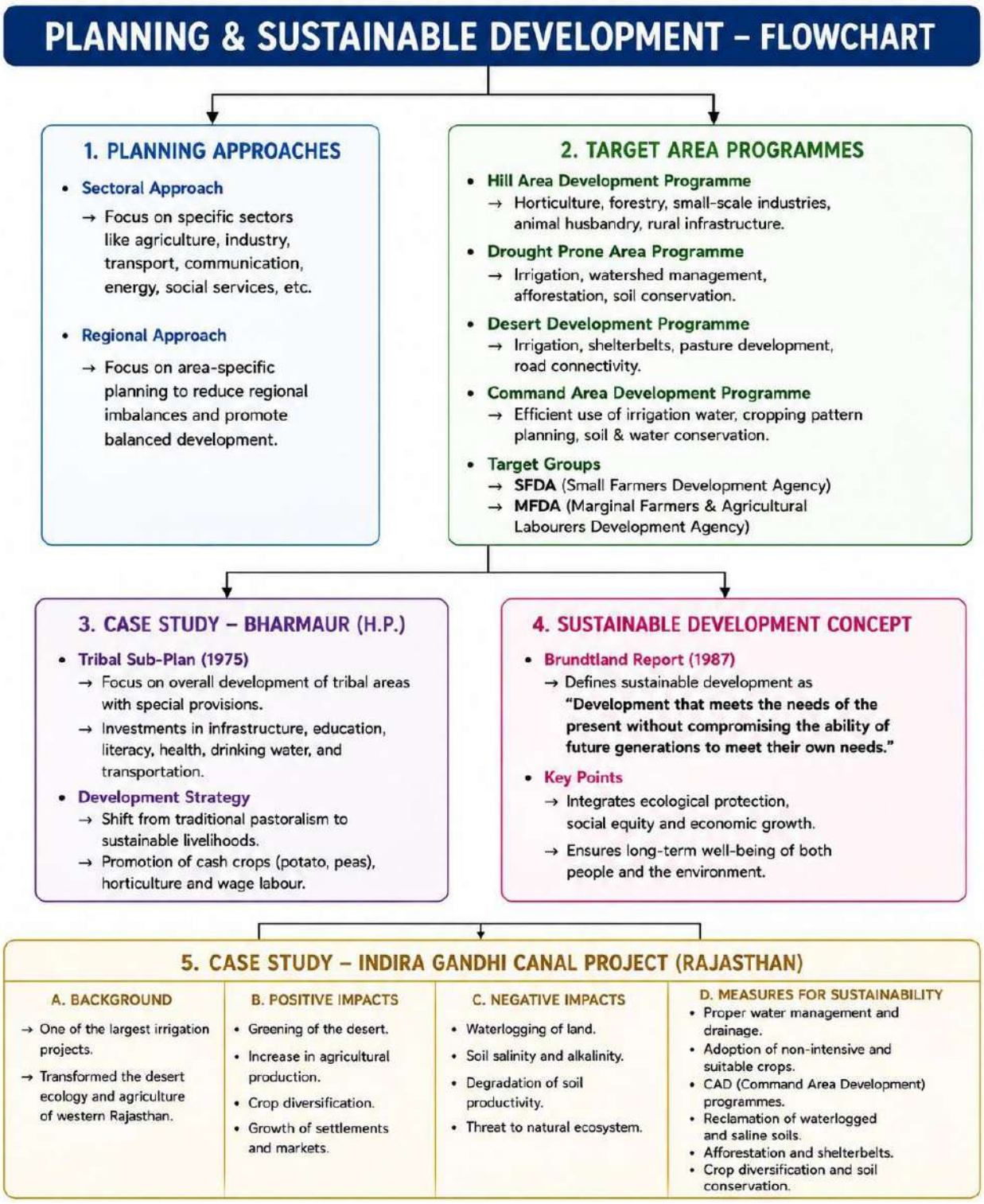
**Ans.**

- The main objectives of this programmes were on the development of Horticulture, Plantation agriculture, Animal Husbandry, Poultry, Forestry.
- The hill area programmes were started in Fifth five year plan.
- The programme was recommended by the national committee on the development of backward area (1981).
- The programme covers all the hilly districts of Uttarakhand, Mikir hill and north Cachar hills of Assam, Darjeeling district of west Bengal and Nilgiri district of Tamil Nadu.

**2. "Indira Gandhi canal is the lifeline of Rajasthan desert". How we can achieve the target of sustainable development in the command area of this canal?**

**Ans.These measures are as follows-**

- Strict implementation of water management policy.
- Adoption of plantation crops such as citrus fruits, instead of water intensive crops.
- To reduce the conveyance loss of water - the CAD (Command area development) programmes i.e. lining of water courses ; levelling Warabandi system.
- The area should be reclaimed that got affected by water logging and soil salinity.
- Promoting eco-development through afforestation, shelter belt, and plantation and pasture development.
- providing financial and institutional support for land cultivation.
- Other sectors of economy in addition to agriculture, animal husbandry and allied activities should be encouraged for attaining economic sustainability.




MCQs Ans 1. D 2. A

# CHAPTER-07: TRANSPORT AND COMMUNICATION

## CHAPTER SUMMARY

### Means of Transport-

●Land transport, Water transport and Air transport.

### Land Transport

- **Road Transport-**

●**1943 | Nagpur Plan:** The first serious attempt at road planning (failed due to lack of coordination between Princely States and British India).

●**1961 | Twenty-Year Road Plan:** Introduced after Independence to improve road conditions

For the purpose of construction and maintenance, roads are classified as:-

1. National Highways (NH), 2. State Highways(SH), 3. Major District Roads
4. Rural Roads 5. Other Roads (Border Roads)

- **National highways-**

●Constructed and maintained by Central Government.

●**NHAI :-** NATIONAL HIGHWAY AUTHORITY OF INDIA – 1995

- Surface Transport Ministry
- Apex body to improve the quality of the roads.

Major NHAI Projects :-

### 1. The Golden Quadrilateral (GQ)

Largest highway project in India ,Connecting four major metropolitan cities.
Delhi (North), Mumbai (West), Chennai (South), and Kolkata (East).
High-quality 4/6 lane roads.

### 2. North-South and East-West Corridors (NS-EW)

North-South Corridor:

Srinagar (Jammu & Kashmir) Kanniyakumari (Tamil Nadu).

**Includes a spur connecting Kochi to Salem.

East-West Corridor:

Silchar (Assam) Porbandar (Gujarat).

### State Highways-

●Constructed and maintained by State Government.

### District Roads-

●Connect District Headquarters with other towns of the district.

### Rural Roads-

●Connects rural areas, PMGSY (Pradhan Mantri Grameen Sadak Yojana)

●Accounts 80% of road length

●Regional variation in road density influenced by terrain and climatic.

### Other Roads- Border Roads and International Highways-

●**Border Road Organisation** (BRO) was started in **1960**,

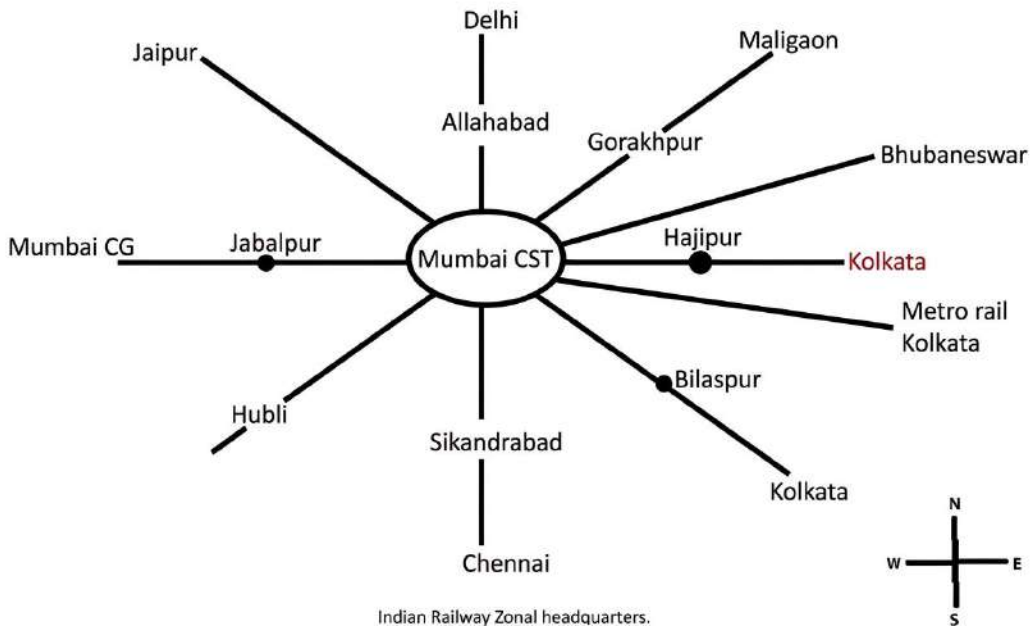
●Strengthening defence preparedness through rapid and coordinated improvement of strategically important roads along the northern and north-eastern boundary.

●Snow clearance in high altitude areas.

- Highest roadway connects Manali-Leh at **4270** mts. altitude.
- Atal Tunnel :- Built by BRO, Manali to Lahaul-Spiti valley.
- Aman Setu between Baramula (India) and Muzaffarabad (Pakistan)

**Rail Transport-**

- The first railway line started in **1853** between Bombay and thane **(34 km.)**
- It is the largest government sector with the length of **67,956 km** (2019-20).
- It is the **largest government undertaking** in India.
- It is divided into **17 zones**.



Indian Railway Zonal headquarters.

**Modernization & Technology**

- Conversion of Metre and Narrow gauges into Broad gauge.
- Steam engines (coal-run) have been replaced by Diesel and Electric engines.
- This shift has increased speed and haulage capacity while reducing pollution at railway stations.

**Urban Transport & Environment**

- **Metro Rail:** It has revolutionized urban travel and helped control pollution.
- **Green Steps**: The combination of the Metro and CNG-run vehicles has significantly reduced air pollution in urban centers.

**Konkan Railway-**

- Terminal stations - Roha (Maharashtra) to Mangalore (Karnataka)
- States-Maharashtra, Goa and Karnataka.

**Railway network is relatively less dense in the hill states, north eastern states, central parts of India and Rajasthan.

**Water Transport-**

- It is the cheapest means of transport and is most suitable for carrying heavy and bulky material.

●It is a fuel-efficient and eco-friendly mode of transport.

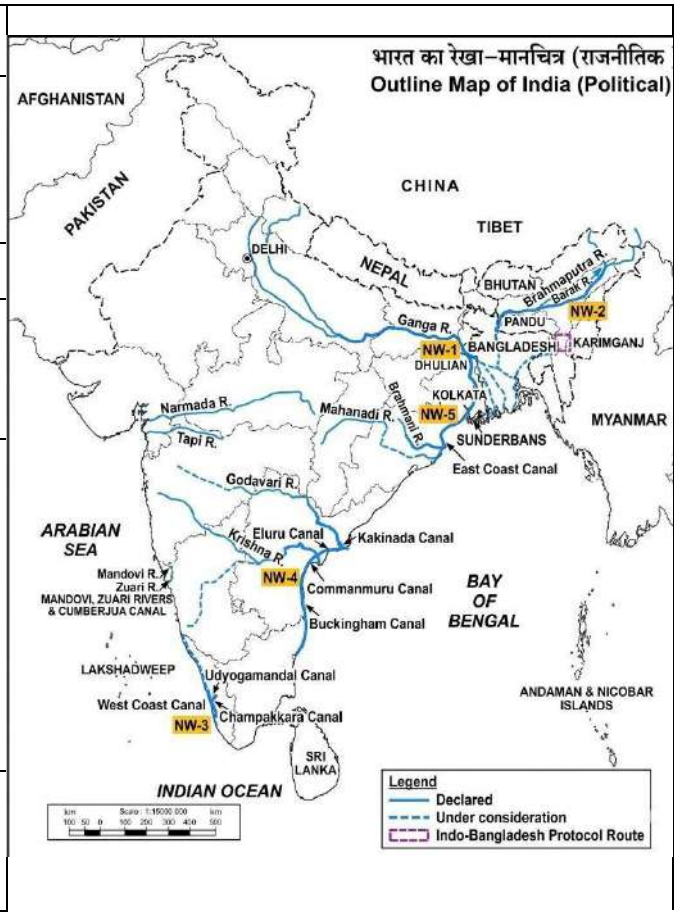
a. **Inland Water ways-** comprises rivers, canals, backwaters, creeks, etc

The Inland Waterways Authority was set up in **1986**.

The backwaters (Kayal) of Kerala famous for Nehru Trophy Boat Race (VALLAMKALI)

b. **Ocean Routes-** Used for international trade and transportation between the islands and the rest of the country.

| NW | Route / Stretch | Key Rivers / Canals | States Covered | Length |
|---|---|---|---|---|
| 1 | Prayagraj – Haldia | Ganga | Uttar Pradesh, Bihar, Jharkhand & West Bengal | 1,620 km |
| 2 | Sadiya – Dhubri | Brahmaputra | Assam | 891 km |
| 3 | Kottapuram – Kollam | West Coast, Champakara & Udyogmandal Canals | Kerala | 205 km |
| 4 | Kakinada – Puducherry | Godavari, Krishna & associated canals | Andhra Pradesh, Telangana, Chhattisgarh, Karnataka, Tamil Nadu, Puducherry and Maharashtra | 1,078 km |
| 5 | Talcher – Dhamra | Brahmani, Matai, Mahanadi Delta & EC Canal | Odisha and West Bengal | 588 km |




## Air Transport-

●Air transport started in 1911 between Allahabad and Naini (10 km.)

●Pawan Hans is the helicopter service operating in hilly areas.

## OIL and Gas Pipeline:-

●Pipelines are the most convenient and efficient mode of transporting liquids and gases over long distances.

●Even solids can be transported through pipelines after converting them into slurry.

●Oil India Limited (OIL) established in 1959.

●Asia's first cross-country pipeline of 1,157 km was built by OIL from Naharkatiya oilfield in Assam to Barauni refinery in Bihar.

●GAIL (India) Ltd. was set up in 1984 to transport, process, and market natural gas.

●The Hazira-Vijaipur-Jagdishpur (HVJ) pipeline, about 1,700 km long, linked major gas fields with fertiliser, power, and industrial centres.

## Communication-

●**Personal Communication**

●**Mass Communication System-**

- **Radio** Started in India in **1923** by the Radio Club of Bombay, All India Radio Akashwani Radio.
- **Television (T.V.)** started in **1959** only in Delhi. After **1972** in other cities, in 1976, TV was delinked from All India Radio (AIR) and got a separate identity as Doordarshan (DD).

●Satellite Communication can be used for the weather forecast, monitoring of natural calamities, surveillance of border areas and telecommunication etc.

## India's Satellite Systems

India operates two major satellite configurations managed through the National Remote Sensing Centre (NRSC) in Hyderabad.

| System | Established | Primary Purpose |
|---|---|---|
| **INSAT (Indian National Satellite System)** | 1983 | Multi-purpose: Telecommunication, meteorology, and data programs. |
| **IRS (Indian Remote Sensing Satellite System)** | 1988 (IRS-1A) | Natural resource management; collects data in spectral bands. |

●**Launch Capability: India developed its own PSLV (Polar Satellite Launch Vehicle) to deploy these satellites.**

**MCQ**

1. Which one of the following is the **headquarters of the Indian Railways**?

A. Mumbai B. Kolkata
C. New Delhi D. Chennai

**2.** Which one of the following is the **largest port in India** in terms of cargo handling?

A. Mumbai Port B. Kandla Port
C. Chennai Port D. Kolkata Port

**SHORT ANSWER QUESTIONS (3 MARKS)**

**4. Why is the density of rural roads very low in hilly, plateau and forested areas? Explain.**

**Ans:**

●Hilly, plateau, and forested areas often have challenging terrain, including steep slopes, uneven surfaces, and rocky terrain, making it difficult to construct and maintain roads.

●Rural areas in hilly, plateau, and forested regions often have a low population density, making it difficult to justify the investment required to construct roads.

●Lack of basic infrastructure in hilly, plateau and forested areas.

●Costs of construction are relatively higher in hilly, plateau and forested areas

**5. "Improved air connectivity helps in regional development in India" Discuss this statement in light of UDAN scheme.**

**Ans**:

●UDAN is a first-of-its kind scheme globally, designed to start the regional aviation market.

●This scheme was conceived by the Ministry of Aviation Govt. of India.

●To promote regional connectivity by making fly affordable for the common citizen.

●To encourage airlines to operate flights on regional and remote routes.

**LONG ANSWER QUESTIONS (5 MARKS)**

6. **"Pipelines are the most convenient and efficient mode of transportation in India." Examine the statement with examples.**

**Ans:**

- Pipelines are the most convenient and efficient mode of transportation liquids and gases over long distances.
- Even solid can also be transported by pipelines after converting them into slurry.
- The first 1,700 km long Hazira-Vijaipur Jagdishpur (HVJ) cross country gas pipeline, constructed by GAIL (India), linked Mumbai High and Bassien gas fields with various fertiliser, power and industrial complexes.
- This artery provides impetus to Indian gas market development.
- Asia's first cross-country pipeline covering a distance of about 1157 km. was constructed by OIL from Naharkatiya oil field in Assam to Barauni refinery in Bihar.

7. **How are Indian Railways contributing to the growth of national economy? Explain with examples.**

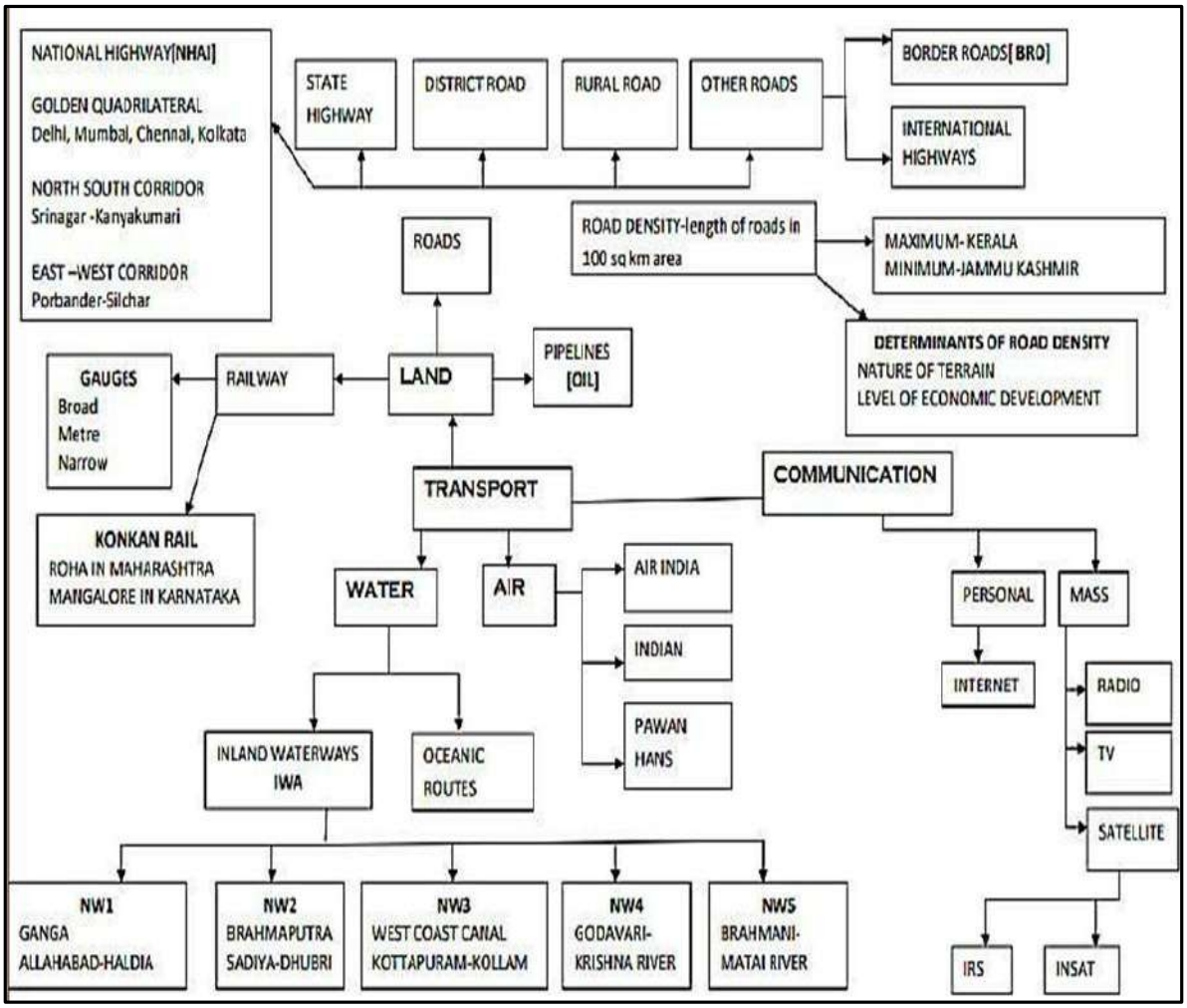
**Ans:**

- Indian railways network is one of the longest in the world.
- It facilitates the movement of both freight and passengers.
- Metro rail has revolutionised the urban transport system in Kolkata and Delhi.
- Railways developed around towns, raw material producing areas, hill stations have been developed for the exploitation of resources.
- Railways could run to remain the main means of transport for the masses.

8. **"Water transport in India play a crucial role in international trade and economic development". Analyze the statement.**

**Ans.** The importance of water transport-

- Cheapest among all means of transport.
- Does not require route construction.
- Fuel efficient and Eco-friendly mode of transport.
- Largely used for cargo transport between the countries.
- India's foreign trade 95 % (by volume) and 70 % (by value) is done through waterways.




MCQs ANS 1. C 2. B

# CHAPTER-08: INTERNATIONAL TRADE

## Map Work

Major Sea Ports: Kandla, Mumbai, Marmagao, Kochi, Mangalore, Tuticorin, Chennai, Vishakhapatnam, Paradwip, Haldia

International Airports: Ahmedabad, Mumbai, Bengaluru, Chennai, Kolkata, Guwahati, Delhi, Amritsar, Thiruvananthapuram & Hyderabad.

## CHAPTER SUMMARY

### Changes in International Trade-

- The nature of India's foreign trade has changed over the years.
- There is a change in volume that is increased but the value of import is more than export
- Increase in trade deficit.
- It is due to rise of petroleum price.

### Changing pattern of the Composition of India's export

- The share of agriculture and allied products has declined.
- The share of petroleum has increased.
- The share of ore-minerals and manufactured goods have largely remained constant.
- Increasing in India's refining capacity also responsible for importing petroleum.
- Declining in traditional goods is due to tough international competition.
- There is a great decline in coffee, spices, pulses, tea.

### Indian Sea Ports-

**Major ports:-** The Central Government formulates policies and executes regulatory functions.

**Minor ports;-** The State Governments regulate the policies and operational functions.

** To compensate for losing the critical Karachi and Chittagong ports to Pakistan and Bangladesh, India strategically developed new ports like Kandla in the west and Diamond Harbour on the Hugli River in the east.

### Deendayal Port (Kandla Port )

- Located at Gulf of Kutch, developed to decrease pressure on Mumbai port.
- Special facilities are available for petroleum.

### Mumbai Port-

- India's largest oil terminal; largest natural port is in Mumbai. It is also known as the Gateway of India.

### Jawaharlal Nehru Port at Nhava Sheva-

- It was developed as a satellite port ; the largest container port in India.

### Marmagao Port-

●It is a natural Harbour in Goa ; to handle iron ore exports to Japan.

### New Mangalore Port-

●It is situated in Karnataka.

### Kochhi Port-

●It is known as the Queen of Arabian Sea. Situated at the head of Vembanad Kayal.

### Kolkata Port-

●It is located at Hooghly River 128 km away from the Bay of Bengal.

### Haldia Port-

●It is located 105 km downstream from Kolkata, constructed to reduce the congestion at Kolkata port.

**Paradwip Port-**

●Situated about 100 km away from Cuttack in Odisha; It is the deepest Harbour.

**Visakhapatnam Port-**

●This port is in Andhra Pradesh and is a **landlocked Harbour**.

**Chennai Port-**

●It is one of the oldest artificial Harbour built in Tamil Nadu.

**Ennore Port-**

●It is a newly developed port in Tamil Nadu.

**Tuticorin Port-**

●It was developed to relieve the pressure of Chennai port.

## Air Transport-

●Air transport plays an important role in the international trade.

●There were 25 major airports functioning in the country (Annual Report 2016-17).

●Under the UDAN scheme, a total number of 73 unserved/underserved airports including 9 Heliports and 2 water aerodromes have been operationalized.

**MULTIPLE CHOICE QUESTIONS (1 MARK)**

**1. Which of the following pairs is not matched correctly?**

| LIST- 1 | LIST-2 |
|---|---|
| A. Hugli river | Diamond Harbour |
| B. Bangladesh | Trade by roadways |
| C. USA | Major trading partner |
| D. Africa | Largest import continent |

**2. Match the list I with list II and choose the correct Answer with the help of given options.**

| Ports | Location/Type |
|---|---|
| I. Kandla port | a. Land locked port |
| II. Mumbai port | b. Natural port |
| III. Visakhapatnam port | c. Oldest port |
| IV. Chennai port | d. At the head of Gulf of Kuchchh |

**Codes:**

| | I | II | III | IV |
|---|---|---|---|---|
| A. | d | b | a | c |
| B. | a | b | c | d |
| C. | b | a | d | c |
| D. | c | d | b | a |

**3. Assertion (A):** International trade is considered the economic barometer of a country.
**Reason (R):** International trade involves the exchange of surplus goods and services between countries.

A. Both A and R are true, and R is the correct explanation of A.

B. Both A and R are true, but R is not the correct explanation of A.

C. A is true, but R is false.

D. A is false, but R is true.

**SHORT ANSWER QUESTIONS (3 MARKS)**

**1. “India has diversified its trade partners and export items in recent decades”. How does this diversification benefit the country’s international trade?**

- Diversification of trade partners and export items reduces India’s dependence on a few countries or commodities.
- It makes trade more stable and less vulnerable to global market fluctuations.
- It enhances economic resilience, and helps India tap into emerging markets and industries.

**2. "India handles a major share of its foreign trade through sea ports. Explain how the development and modernization of sea ports can enhance India’s role in global trade."**

- India’s sea ports handle about 95% of the country’s foreign trade by volume.
- Modernizing ports with better cargo handling, digital systems, and improved connectivity under initiatives.
- The sea port act as collection centres of commodities from the hinterland for further shipment to foreign destinations.
- Ports are receiving points of foreign goods and consignments coming to India for distributing them into the interior parts of the country.

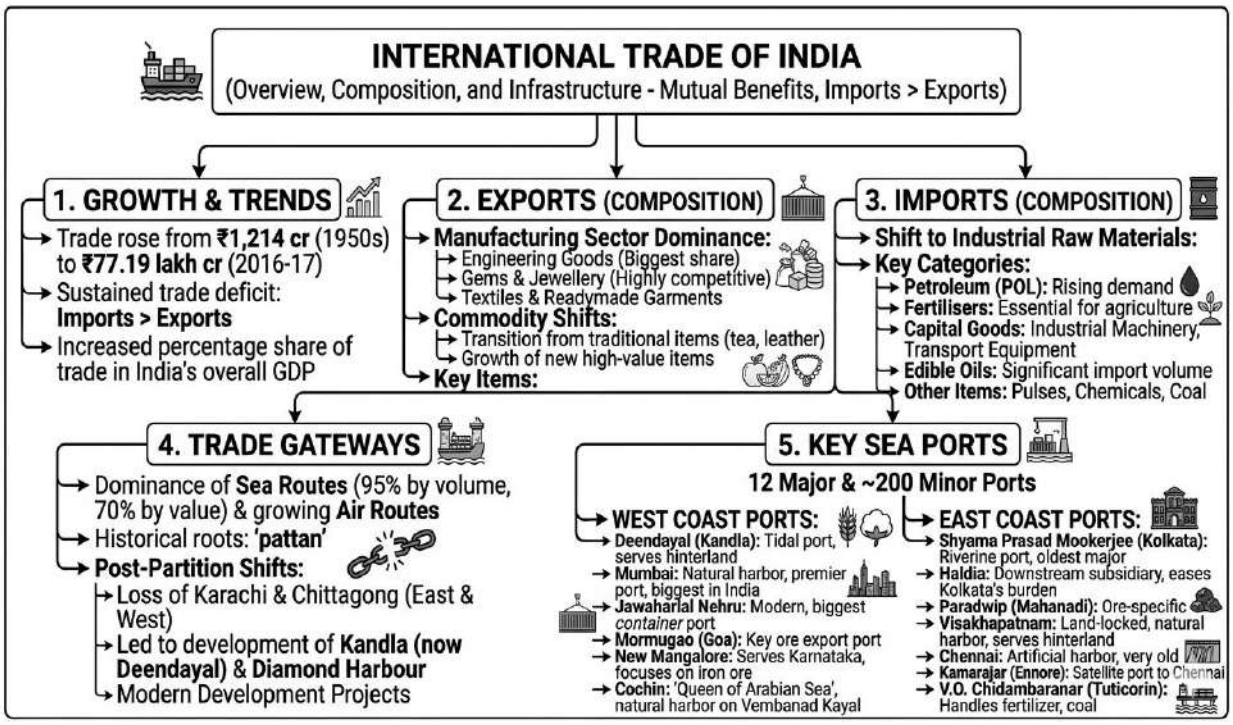
## LONG ANSWER QUESTIONS (5 MARKS)

**1. "India's import pattern has changed significantly over the decades”. Analyze the reasons behind India’s imports."**

- Earlier import was food grains, capital goods, machinery.
- The balance of payment was adverse as imports were more than export.
- After 1970s, foodgrain import was discontinued due to the success of Green revolution.
- Foodgrain import was replaced by fertilisers and petroleum.
- There is a rise in the import of petroleum products due to increasing use as fuel and industries.
- The, import of capital goods and allied products maintained a steady decline.

**2. “India relies heavily on imports for crude oil and electronic goods”. What measures can be taken to reduce dependency on imports?**

- Reducing India’s dependency on imports for crude oil and electronic goods while maintaining growth
- Requires a strategic mix of domestic capacity building, technological advancements, policy support, and sustainable practices.
- Boost Renewable Energy Production by Expanding Renewable Energy Infrastructure.
- Enhance Domestic Oil Production. Develop Domestic Manufacturing Capabilities.
- Build Electronics Ecosystem by Creating Electronic Clusters, developing special economic zones (SEZs) focused on electronics manufacturing.
- By adopting anti-Dumping Measures: such as implementing anti-dumping duties on low- cost imported electronics to encourage domestic alternatives.




MCQs ANS 1. D 2. A 3. A

## CHAPTER-09:

## GEOGRAPHICAL PERSPECTIVE ON SELECTED ISSUES AND PROBLEMS

### CHAPTER SUMMARY

**Environmental Pollution-** Environmental pollution is the introduction of foreign and potentially harmful elements into the environment.

**Types of Pollution-** (i) air pollution, (ii) water pollution, (iii) land pollution and (iv) Noise pollution.

**Water Pollution-** Water pollution is the introduction of pollutants into water sources, degrading its quality.

**Effects of Water Pollution-** Water pollution is a source of various water- borne diseases. The diseases commonly caused due to contaminated water are Diarrhoea, intestinal worms, hepatitis, etc.

### Air Pollution-

- Air pollution is taken as addition of contaminants, like dust, fumes, gas, fog, odour, smoke or vapour to the air. Combustion of fossil fuels, mining and industries are the main sources of air pollution.
- Air pollution causes various diseases related to respiratory, nervous and circulatory systems.
- Smoky fog over cities called as urban smog is caused by atmospheric pollution.

### Noise Pollution-

- Noise pollution refers to the state of unbearable and uncomfortable to human beings which is caused by noise from different sources - factories, mechanised construction and demolition works, automobiles, aircrafts, sirens, loudspeakers used in various festivals etc.
- The level of steady noise is measured in decibels (dB).

### Urban Waste Disposal-

- Solid waste refers to a variety of old and used articles - small pieces of metals, broken glassware, plastic containers, polythene bags, ash, floppies, CDs, etc., dumped at different places.
- Urban wastes disposed of from two sources: (i) household or domestic establishments, and (ii) industrial or commercial establishments.
- In metropolitan cities like Mumbai, Kolkata, Chennai, Bengaluru, etc., about 90 per cent of the solid waste is collected and disposed.

### Land Degradation-

- Land degradation either as a temporary or a permanent decline in productive capacity of the land.
- There are other types of degraded lands such as waterlogged and marshy areas, land affected by salinity and alkalinity.
- The Swachh Bharat Mission (SBM) is part of the urban renewal mission launched by the Government of India to improve the quality of life in urban slums.

### MULTIPLE CHOICE QUESTIONS (1 MARK)

**1. Assertion:** The dumping of industrial waste into rivers leads to water pollution.

**Reason:** Concentration of industrial units in and around urban centres do not give rise to disposal of industrial wastes.

A. Both Assertion and reason are true and reason is correct explanation of assertion.
B. Assertion and reason both are true but reason is not the correct explanation of assertion.
C. Assertion is true, reason is false.
D. Assertion is false, reason is true.

**2. Assertion:** The pressure on agricultural land has increased.
**Reason:** It is not only due to the limited availability but also by deterioration of quality of agricultural land.
A. Both Assertion and reason are true and reason is correct explanation of assertion.
B. Assertion and reason both are true but reason is not the correct explanation of assertion.
C. Assertion is true, reason is false.
D. Assertion is false, reason is true.

**3.** Which one of the following major cause of environment pollution?
A. From the release of substances and energy from the waste products of human activities.
B. From the release of substances and energy by Plants.
C. From the release of Substance and energy by Animals
D. All of the above

**9. "In India all surface water sources are fit for human consumption"**
Choose the correct Answer given below.
A. True B. False C. Partially True D. Partially False

**5. Assertion:** Environmental pollution by solid wastes has now become significant.
**Reason:** Enormous growth in the quantity of wastes generated from various sources is responsible for it.
A. Both Assertion and reason are true and reason is correct explanation of assertion.
B. Assertion and reason both are true but reason is not the correct explanation of assertion.
C. Assertion is true, reason is false.
D. Assertion is false, reason is true.

**6.** Consider the following statements related with disease-
1. The diseases commonly caused due to contaminated water are diarrhoea, intestinal worms, hepatitis, etc.
2. Air pollution causes various diseases related to respiratory, nervous and circulatory systems.
Choose the correct options for the same-
A. Only 1 is correct B. Both 1 and 2 are correct
C. Only 2 is correct D. Both are incorrect

## SHORT ANSWER QUESTIONS (3 MARKS)

**1. "Noise pollution is a growing urban problem in India". Evaluate the major source of noise pollution.**
**Ans:** The main sources of noise pollution are-

- Various factories, mechanised construction and demolition works.
- Automobiles and aircraft.
- Noise from sirens, loudspeakers used in various festivals programmes.
- Noise produced by traffic.

**2. Why are the children of slum-dwellers deprived of school education?**
**Ans:** Major causes are poverty, lack of resources, and limited access to quality education, **Poverty, Child Labour, Lack of Family Support, Discrimination and Social Exclusion, Lack of Awareness, Cultural Practices, Disabilities etc.**

## LONG ANSWER QUESTIONS (5 MARKS)

**1. "Urban areas in India are generally marked by overcrowding, and inadequate facilities to support the fast-growing population." Justify the statement.**
**Ans:**

- The population of urban areas is growing very fast leading to great pressure on all the amenities.

- The facilities to support growing population are not adequate.
- Poor sanitation and polluted air.
- Large quantity of waste is generated and there is no proper system of waste management.
- Unregulated growth of population has resulted in the generation of slums.
- It is difficult to provide facilities in the overcrowded narrow streets.
- Industrial units in and around the urban areas make the environment worse.

**2. "Indiscriminate use of water by increasing population and industrial expansion has led to degradation of the quality of water considerably." Evaluate the statement.**

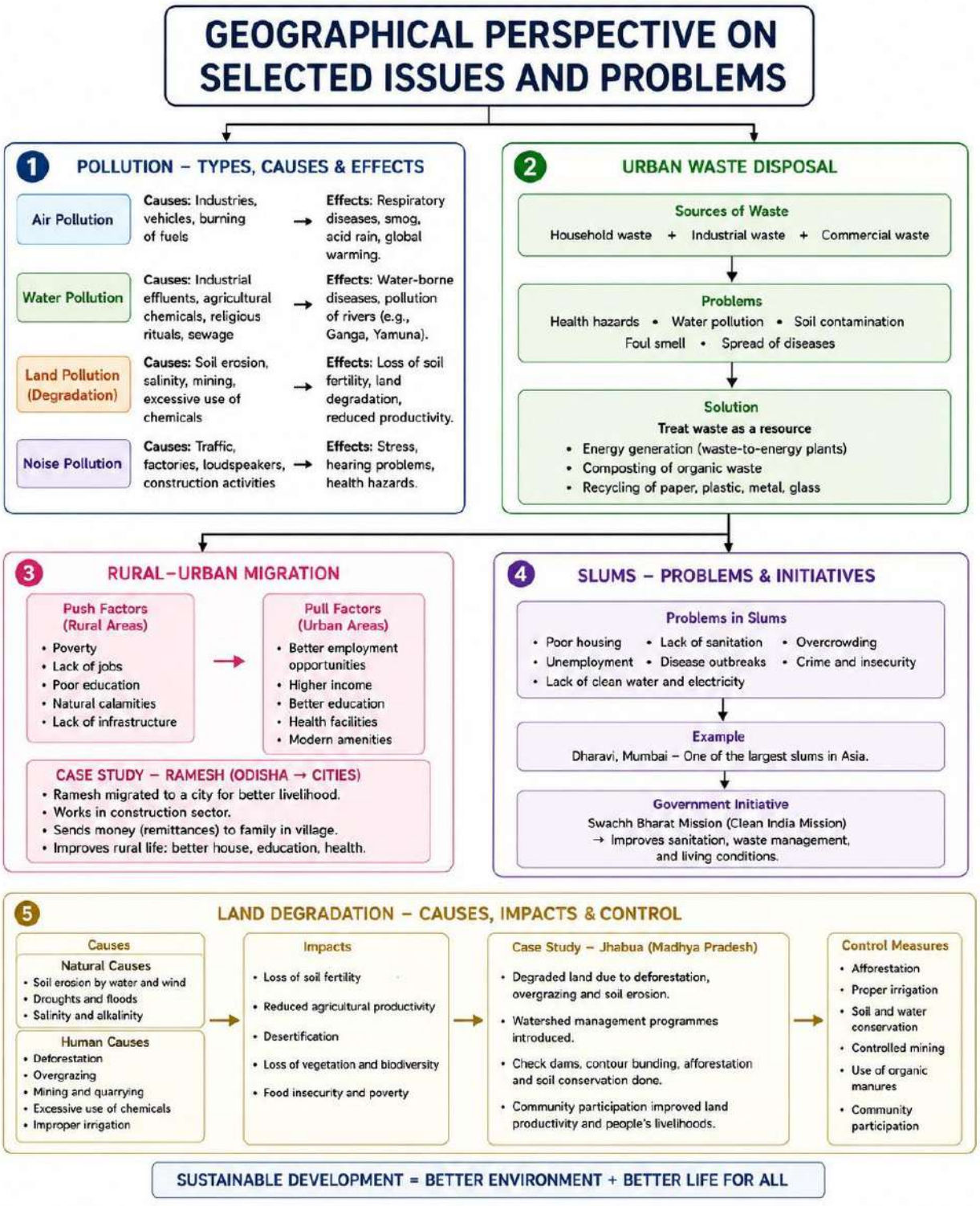
**Ans:**

- Increasing population and industrial expansion are responsible for water pollution.
- Domestic and sewage waste water remains untreated.
- Excessive use of fertilizers and pesticides in farming results in water pollution.
- Cultural activities: fairs, tourism, pilgrimage etc.
- Industries produce many undesirable substances which pollutes water.
- Chemical residues and toxins pollute water.

**3. "Slums are a consequence of rapid urbanization but also reflect social and economic inequalities." Justify the statement.**

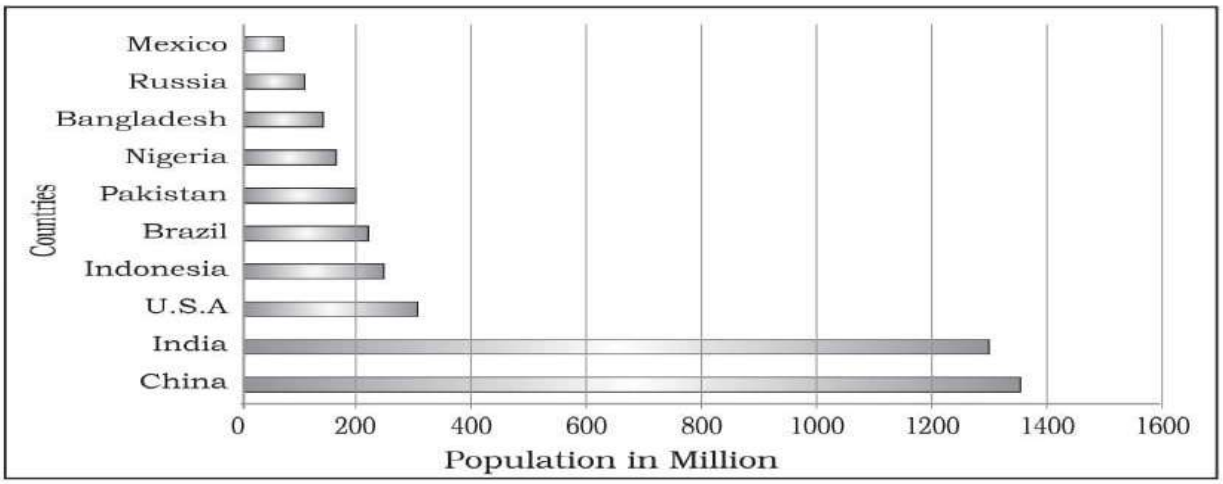
**Ans:** Slums are residential areas of the least choice having inhuman living conditions, dilapidated houses, poor ventilation, and lack of basic amenities. Following problems are-

- Most houses are old and poorly maintained.
- It is marked by poor hygienic conditions, poor ventilation, and lack of basic amenities.
- Open defecation, unregulated drainage system and overcrowded Narrow Street patterns etc.
- Most of the slum population works in low-paid, high risk-prone, unorganised sectors of the urban economy.
- Owing to poverty most population is undernourished, prone to different types of diseases and illness.
- The poverty makes them vulnerable to drug abuse, alcoholism, crime, vandalism, escapism, apathy and ultimately social exclusion.




MCQs Ans 1. C 2. A 3. A 4. B 5.A 6.B

## COMPENTANCY BASED QUESTIONS




Q1.1. Estimate the combined population of Brazil and Pakistan.

**Answer:** Brazil has about 220 million people and Pakistan has about 200 million people. Combined population = approximately 420 million.

**Q 1.2"India's population is nearly four times that of the U.S.A." Is the statement correct? Justify your answer.**

**Answer:** Yes, the statement is approximately correct. India's population is about 1250 million and the U.S.A.'s population is about 300 million. 1250 ÷ 300 ≈ 4

Q1.3. Mention any two major problems faced by highly populated countries.

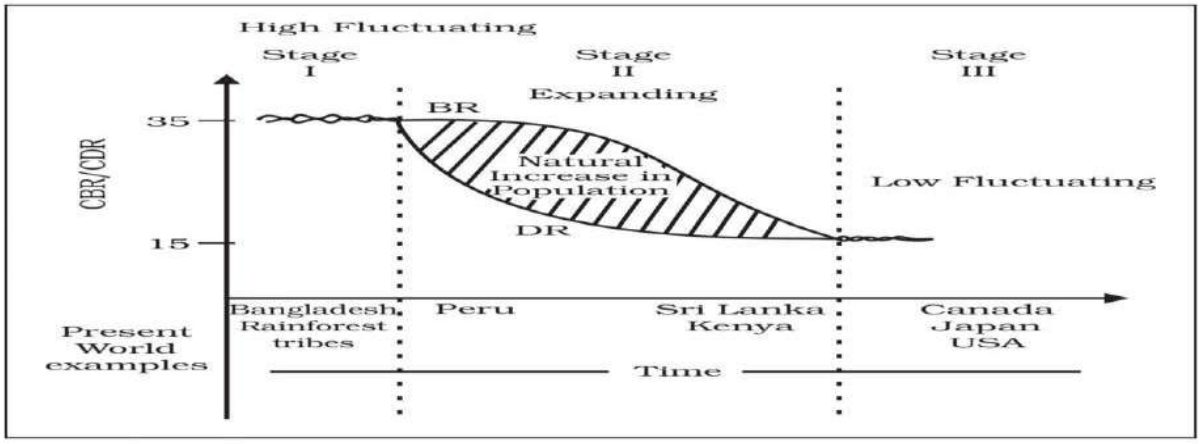
**Answer:**1. Pressure on natural resources

2. Unemployment and housing problems

Q1.4. If the population of India increases by 100 million, will it surpass China? Give reasons.

**Answer:** Yes. India's population is about 1250 million. After an increase of 100 million, it would become about 1350 million, which would be equal to or slightly higher than China's population

---




Q2.1. In which stage does the natural increase in population become maximum?

**Answer:** The natural increase in population becomes maximum during Stage II.

Q2.2. Identify the stage in which countries like Canada, Japan, and the USA are placed. Mention one characteristic of this stage.

**Answer:** Canada, Japan, and the USA are placed in Stage III.

One characteristic of this stage is low birth rate and low death rate, resulting in stable population growth.

## Q2.3.Which stage of the demographic transition model shows high birth rate and high death rate?

**Answer:** Stage I shows high birth rate and high death rate.

## Q2.4.Why is Stage I called the "High Fluctuating Stage"?

**Answer:** Stage I is called the "High Fluctuating Stage" because both birth rate and death rate remain very high and fluctuate frequently, resulting in slow population growth.

---

***Table 1.1 : Decadal Growth Rates in India, 1901-2011***

| Census Years | Total Population | Growth Rate* | |
|---|---|---|---|
| | | Absolute Number | % of Growth |
| 1901 | 238396327 | ---------- | ---------- |
| 1911 | 252093390 | (+) 13697063 | (+) 5.75 |
| 1921 | 251321213 | (–) 772117 | (–) 0.31 |
| 1931 | 278977238 | (+) 27656025 | (+) 11.60 |
| 1941 | 318660580 | (+) 39683342 | (+) 14.22 |
| 1951 | 361088090 | (+) 42420485 | (+) 13.31 |
| 1961 | 439234771 | (+) 77682873 | (+) 21.51 |
| 1971 | 548159652 | (+) 108924881 | (+) 24.80 |
| 1981 | 683329097 | (+) 135169445 | (+) 24.66 |
| 1991 | 846302688 | (+) 162973591 | (+) 23.85 |
| 2001 | 1028610328 | (+) 182307640 | (+) 21.54 |
| 2011** | 1210193422 | (+) 181583094 | (+) 17.64 |

* Decadal growth rate: $g = \frac{P_2 - P_1}{P_1} 100$

where $P_1$ = population of the base year
$P_2$ = population of the present year

** Source : Census of India, 2011(Provisional)

## Q3.1. Why is the year 1921 called the "Year of Great Divide" in the demographic history of India?

**Answer:** The year 1921 is called the "Year of Great Divide" because it was the only year in which India recorded a negative population growth rate. After 1921, population started increasing continuously.

## Q3.2. During which decade did India record the highest decadal growth rate (%)?

**Answer:** India recorded the highest decadal growth rate during 1961–1971, which was 24.80%.

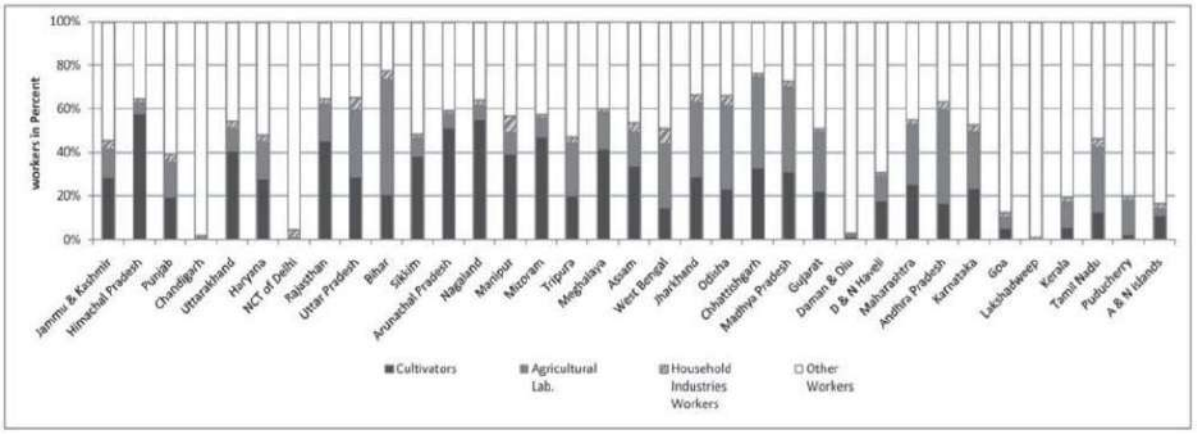
## Q3.3.Which decade showed the highest increase in absolute population?

**Answer:** The decade 2001–2011 showed the highest increase in absolute population, with an increase of 181,583,094 people.

## Q3.4.What does the declining growth rate after 1991 indicate about India's population trend?

**Answer:** The declining growth rate after 1991 indicates that population growth in India is slowing down due to increased literacy, awareness, and family planning measures.

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## Q4.1.Which category of workers occupies the highest percentage in most Indian states shown in the graph?

**Answer:** The category "Other Workers" occupies the highest percentage in most Indian states.

## Q4.2.Which states show a very high percentage of cultivators?

**Answer:** States like Bihar, Arunachal Pradesh, and Chhattisgarh show a very high percentage of cultivators.

## Q4.3. What does a high percentage of agricultural labourers indicate about a state's economy?

**Answer:** A high percentage of agricultural labourers indicates dependence on agriculture, low industrial development, and limited employment opportunities in other sectors.

**Q4.4. Identify the worker categories shown in the graph.**

**Answer:** The graph shows four categories of workers:

1. Cultivators
2. Agricultural Labourers
3. Household Industry Workers
4. Other Workers

## Q4.5. Which worker category is generally lowest in most states according to the graph?

**Answer:** Household Industry Workers form the lowest percentage in most states.

| Religious Group | 2011 | |
|---|---|---|
| | Population (in million) | % of Total |
| Hindus | 966.3 | 79.8 |
| Muslims | 172.2 | 14.2 |
| Christians | 27.8 | 2.3 |
| Sikhs | 20.8 | 1.7 |
| Buddhists | 8.4 | 0.7 |
| Jains | 4.5 | 0.4 |
| Other Religions and Persuasions (ORP) | 7.9 | 0.7 |
| Religion Not Stated | 2.9 | 0.2 |

**Q 5.1According to the given data, what is the exact difference (in million) between the population of Jains and those whose 'Religion Not Stated'?**
**(A)** 1.6 million
**(B)** 2.0 million
**(C)** 7.4 million
**(D)** 4.3 million
**Answer: (A) 1.6 million**
**Q 5.2 Assertion (A): In 2011, the population of Jains was less than half of the population of Sikhs.**
**Reason (R): According to the table, the population of Sikhs was 20.8 million and the population of Jains was 4.5 million.**
**Choose the correct option:**
**(A)** Both (A) and (R) are true and (R) is the correct explanation of (A).
**(B)** Both (A) and (R) are true but (R) is not the correct explanation of (A).
**(C)** (A) is true but (R) is false.
**(D)** (A) is false but (R) is true.
**Answer: (A) Both (A) and (R) are true and (R) is the correct explanation of (A).**
**Q 5.3What is the combined population percentage of Christians and Sikhs together?**
**Answer: 4.0%** (calculated as 2.3% + 1.7%).
**Q 5.4Which minority religious group has the highest population according to the table?**
**Answer: Muslims** (with a population of **172.2 million**).
**Q 5.5Which category recorded the lowest population percentage among all those listed?**
**Answer: Religion Not Stated** (with **0.2%**).
---

| 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 |

**Q 6.1 According to the given table, which economic sector in India employed the highest percentage of the total workforce in 2011?**
(A) Secondary Sector
(B) Tertiary Sector
(C) Primary Sector
(D) Both Primary and Tertiary equally
**Answer: (C) Primary Sector**
Q 6.2 Looking at the gender distribution across all three sectors, which of the following statements is completely accurate?
(A) Female workers outnumber male workers in the Secondary sector.
(B) Male workers outnumber female workers in every single sector.
(C) The Tertiary sector has the highest absolute number of female workers.
(D) The Primary sector has the lowest absolute number of male workers.
**Answer: (B) Male workers outnumber female workers in every single sector.**
Q 6.3 **Identify the sector that has the sharpest numerical gap between male and female workforce participation based on the table.**
**Answer:** The **Tertiary Sector** exhibits the sharpest gap. The male workforce stands at 15, 66, 43,220 while the female workforce is only 4, 37, 41,311, showing a difference of more than 11.29 crore (112.9 million) workers.
**Q 6.4 Calculate the total number of female workers across all three sectors combined using the data provided.**
**Answer:** Total Female Workers = Female (Primary) + Female (Secondary) + Female (Tertiary)
Total = 9,75,75,398 + 85,60,672 + 4,37,41,311 =14,98,77,381
The total female workforce across all categories combined is 14, 98, 77,381 (approx. 14.99 crore)

| Year | Number of Towns/UAs | Urban Population (in Thousands) | % of Total Population | Decennial Growth (%) |
|---|---|---|---|---|
| 1901 | 1,827 | 25,851.9 | 10.84 | — |
| 1911 | 1,815 | 25,941.6 | 10.29 | 0.35 |
| 1921 | 1,949 | 28,086.2 | 11.18 | 8.27 |
| 1931 | 2,072 | 33,456.0 | 11.99 | 19.12 |
| 1941 | 2,250 | 44,153.3 | 13.86 | 31.97 |
| 1951 | 2,843 | 62,443.7 | 17.29 | 41.42 |
| 1961 | 2,365 | 78,936.6 | 17.97 | 26.41 |
| 1971 | 2,590 | 1,09,114 | 19.91 | 38.23 |
| 1981 | 3,378 | 1,59,463 | 23.34 | 46.14 |
| 1991 | 4,689 | 2,17,611 | 25.71 | 36.47 |
| 2001 | 5,161 | 2,85,355 | 27.78 | 31.13 |
| 2011* | 6,171 | 3,77,000 | 31.16 | 31.08 |

**Q 7.1 In which specific census year did the Decennial Growth (%) of India's urban population reach its highest value recorded in the table?**
(A) 2011
(B) 1981
(C) 1951
(D) 1941
**Answer: (B) 1981**
**Q 7.2 Based on the trend shown in the "% of Total Population" column, what can be logically inferred about the rural population share of India between 1901 and 2011?**
(A) The rural population percentage continuously increased.
(B) The rural population percentage remained completely stagnant at around 50%.
(C) The rural population percentage generally decreased as urbanization expanded.
(D) The rural population became exactly zero by the year 2011.
**Answer: (C) The rural population percentage generally decreased as urbanization expanded.**
**Q 7.3 Identify the decade that experienced the lowest positive decennial growth rate according to the data, and state its value.**

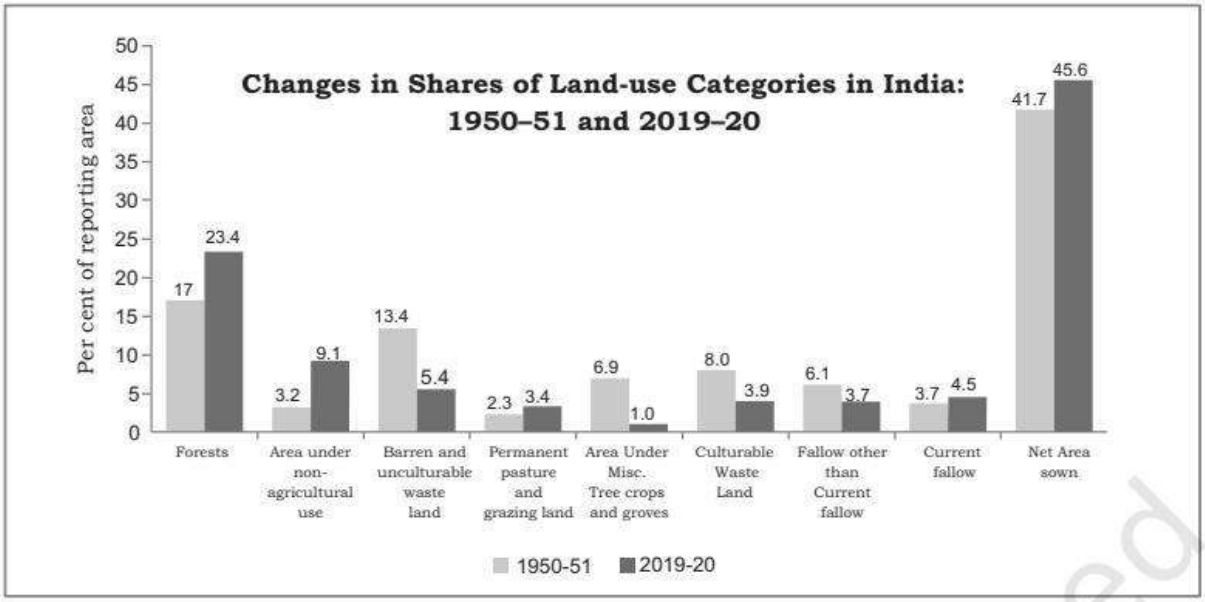
**Answer:** The lowest positive decennial growth rate occurred in the **1901–1911** decade (recorded under the year 1911), with a minimal growth value of **0.35%**.

**Q7.4. Compare the total number of urban towns/UAs in the year 1901 with the year 2011, and calculate the exact numerical increase.**

**Answer:** Number of Towns in 2011 = 6,171

Number of Towns in 1901 = 1,827

**Numerical Increase:** 6,171 - 1,827 = 4,344 towns/UAs.




**Q1. (Data Interpretation)** Based on the graph, which land-use category experienced the highest percentage-point increase in its share between 1950–51 and 2019–20?

(A) Net Area Sown

(B) Forests

(C) Area under non-agricultural use

(D) Permanent pasture and grazing land

**Answer: (B) Forests**

Which of the following land-use categories shows a trend that directly reflects the increasing pressure of urbanization and infrastructure development in India?

(A) Culturable Waste Land

(B) Barren and unculturable waste land

(C) Area under non-agricultural use

(D) Current fallow

**Answer: (C) Area under non-agricultural use**

The decline in "Barren and unculturable waste land" along with "Culturable Waste Land" most likely indicates:

(A) Complete loss of fertile topsoil across the country.

(B) Reclamation and conversion of degraded lands into productive agricultural or non-agricultural uses.

(C) A reduction in India's total geographical area.

(D) An increase in the amount of abandoned land.

**Answer: (B) Reclamation and conversion of degraded lands into productive agricultural or non-agricultural uses.**

**Identify all the land-use categories from the graph that showed an upward trend (increase in share) from 1950–51 to 2019–20.**

**Answer:** The categories that showed an upward trend are:

Forests (17% → 23.4%)

Area under non-agricultural use (3.2%------ 9.1%)

Permanent pasture and grazing land (2.3%---- 3.4%)

Current fallow (3.7% --------4.5%)

Net Area sown (41.7% ---------45.6%)

**Calculate the total combined percentage share of 'Net Area Sown' and 'Forests' in the year 2019–20, and explain its significance.**

**Answer:**

Combined Share = 45.6 % (Net Area Sown)+ 23.4% (Forests)= 69.0%

| *Agricultural Land-use Categories* | *As a percentage of Reporting Area* | | *As a percentage of total cultivable land* | |
|---|---|---|---|---|
| | 1950-51 | 2019-20 | 1950-51 | 2019-20 |
| Culturable Waste land | 8.0 | 3.9 | 13.4 | 6.8 |
| Fallow other than Current Fallow | 6.1 | 3.7 | 10.2 | 6.4 |
| Current Fallow | 3.7 | 4.5 | 6.2 | 7.8 |
| Net Area Sown | 41.7 | 45.6 | 70.0 | 79.0 |
| Total Cultivable Land | 59.5 | 57.7 | 100.00 | 100.00 |

**Q 9.1 Which agricultural land-use category is the ONLY one that showed an increase in its percentage share across both measurement metrics (Reporting Area and Total Cultivable Land) between 1950–51 and 2019–20?**

(A) Culturable Waste land
(B) Fallow other than Current Fallow
(C) Current Fallow
(D) Total Cultivable Land

**Answer: (C) Current Fallow**

**Q 9.2 By looking at the column "As a percentage of total cultivable land" for 2019–20, what proportion of India's cultivable land was actually being actively cultivated (Net Area Sown)?**

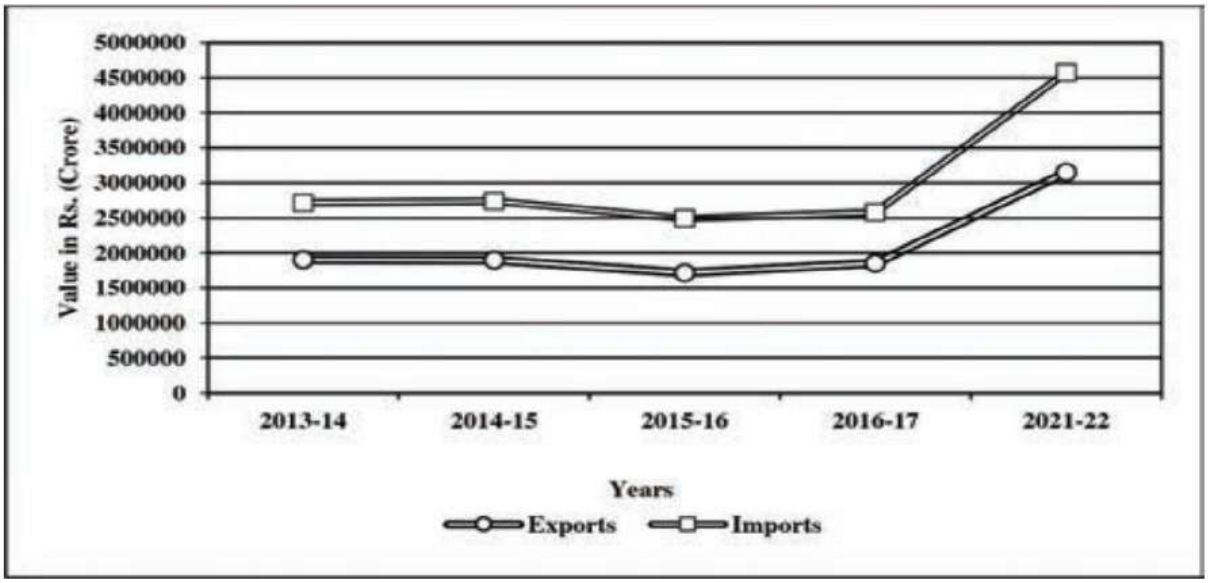
(A) Less than half
(B) Exactly three-quarters (75%)
(C) Nearly four-fifths (79%)
(D) Over (90%)

**Answer: (C) Nearly four-fifths (79%)**

**Q 9.3 Calculate the exact net decrease in the percentage share of "Culturable Waste land" as a percentage of total cultivable land from 1950–51 to 2019–20.**

**Answer:** Share in 1950–51 = 13.4%
Share in 2019–20 = 6.8%
**Net Decrease:** 13.4% - 6.8% = 6.6%

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**Q 10.1 Looking closely at the gap between the two lines across the entire timeline, what can be consistently inferred about India's Balance of Trade?**
(A) India consistently maintained a trade surplus because exports were higher than imports.
(B) India's balance of trade fluctuated between surplus and deficit every alternate year.
(C) India consistently faced a trade deficit because imports remained higher than exports throughout the period.
(D) Exports and imports became exactly equal in the year 2015–16.
**Answer: (C) India consistently faced a trade deficit because imports remained higher than exports throughout the period.**
**Q 10.2 In which specific financial year did both exports and imports experience a visible decline simultaneously before rising again?**
(A) 2014–15
(B) 2015–16
(C) 2016–17
(D) 2021–22
**Answer: (B) 2015–16**
**Q 10.3 Contrast the general growth pattern observed in trade between the 2013–2017 period and the 2017–2022 period.**
**Answer:** Between 2013–14 and 2016–17, India's international trade remained relatively stagnant and flat, fluctuating narrowly within a fixed range. Conversely, between 2016–17 and 2021–22, both imports and exports experienced an exponential, sharp upward surge, reaching their highest historic values.
**Q 10.4 Evaluate how the "Trade Gap" (Trade Deficit) in 2021–22 visually compares to the gap in 2013–14. What does this tell us about foreign trade pressure?**
**Answer:** Visually, the vertical distance between the import and export lines in 2021–22 is noticeably wider than the distance in 2013–14. This expanding gap signifies that the absolute value of the trade deficit increased significantly over time, indicating a growing dependence on higher-value imports relative to export earnings.

***Table 8.5 : Import of Some Principal Commodities***
*(in crore rupees)*

| Commodities | 2021-22 |
|---|---|
| Fertilisers and fertiliser manufacturing | 105796 |
| Edible oils | 141532 |
| Pulp and waste paper | 11934 |
| Non-ferrous metals | 499766 |
| Iron and steel | 94053 |
| Petroleum, oil and lubricants | 1207803 |
| Pearls, precious and semi-precious stones | 231279 |
| Medicinal and Pharma products | 67545 |
| Chemical products | 308882 |

Q 11.1Which commodity had the highest import value in 2021–22?

A. Chemical products
B. Non-ferrous metals
C. Petroleum, oil and lubricants
D. Edible oils
**Answer:** C. Petroleum, oil and lubricants

## Q 11.2 The import value of edible oils in 2021–22 was:

A.Rs. 94,053 crore
B. Rs.141, 532 crore
C. Rs.67, 545 crore
D. Rs.231, 279 crore
**Answer:** B. Rs. 141,532 crore

## Q 11.3 Why are petroleum imports important for India?

**Answer:** Petroleum imports are important because they meet energy needs for transport, industries, and electricity generation.

## Q 11.4 Which imported commodity is related to agriculture?

**Answer:** Fertilisers and fertiliser manufacturing are related to agriculture.

## Q 11.5 Mention one way India can reduce import expenditure.

**Answer:** India can reduce import expenditure by increasing domestic production of petroleum alternatives, edible oils, or fertilisers.

---

*Table 8.1 India's Foreign Trade*

*(Value in Rs. Crore)*

| Year | Exports | Imports | Trade Balance |
|---|---|---|---|
| 2004-05 | 3,75,340 | 5,01,065 | -1,25,725 |
| 2009-10 | 8,45,534 | 13,63,736 | -5,18,202 |
| 2013-14 | 19,05,011 | 27,15,434 | -8,10,423 |
| 2016-17 | 18,52,340 | 25,77,422 | -7,25,082 |
| 2021-22 | 31,47,021 | 45,72775 | -14,25,753 |

*Source : http://commerce.nic.in/publications/annual-report - 2010-11 and Economic Survey 2016-17, 2022-23*

## Q 12.1 What was India's trade balance in 2013–14?

A. Rs 5,18,202 crore
B. Rs 7,25,082 crore
C. Rs 8,10,423 crore
D. Rs 14,25,753 crore
**Answer:** C. Rs 8,10,423 crore

## Q 12.2 Which statement best describes India's trade balance during the given years?

A. India had a trade surplus
B. India's exports were greater than imports
C. India experienced trade deficit in all years
D. Imports remained constant
**Answer:** C. India experienced trade deficit in all years

## Q 12.3 Which of the following can help reduce India's trade deficit?

A. Increasing imports only
B. Reducing exports
C. Promoting domestic production and exports
D. Increasing dependence on foreign goods
**Answer:** C. Promoting domestic production and exports

## Q 12.4 How can increasing exports benefit the Indian economy?

**Answer:** Increasing exports earns more foreign exchange, creates employment, and helps reduce trade deficit.

## Q 12.5 Analyse the trend of India’s foreign trade from the table.

**Answer:** Both exports and imports increased significantly over the years, but imports grew faster than exports, resulting in a rising trade deficit.

# Government Flagship Schemes

## The National Youth Policy (NYP–2014)

- Launched in February 2014
- 'Youth' - 15–29 years.
- "To empower the youth of the country to achieve their full potential, and through them enable India to find its rightful place in the community of nations".

## The National Policy for Skill Development and Entrepreneurship in 2015

- To provide an umbrella framework to all skilling activities being carried out within the country, and to align these to common standards and link skilling with demand centres.

## 'Beti Bachao–Beti Padhao'

- The Government of India has introduced Beti Bachao Beti Padhao programme to address the issue of decline in child sex ratio.

## UNDP Stated "If development is not engendered it is endangered" (HDR UNDP 1995).

- A society, which fails to acknowledge and take effective measures to remove such discriminations, cannot be treated as a civilized one.

## The census of India, 1991 defines urban settlements as

- "All places which have municipality, corporation, cantonment board or notified town area committee
- Minimum population of *5000 persons*,
- At least *75 % of male workers are engaged in non-agriculture*
- *Density of population of at least 400 persons per square kilometer* are urban.

## Smart Cities Mission

- Objective - To promote cities that provide core infrastructure, a clean and sustainable environment and give a decent quality of life to its citizens. The *focus is on sustainable and inclusive development*

## National Mission for Sustainable Agriculture (NMSA)

- NMSA is to make agriculture more productive, sustainable, remunerative and climate resilient by promoting location specific integrated/composite farming.
- The Government has been promoting organic farming in the country through the scheme such as **Paramparagat *Krishi Vikas Yojana (PKVY)* and *Rashtriya Vikas Yojana (RKVY)*.**

## Farmer's Portal of India

- The Farmer's Portal is a platform related to provide agriculture related information like insurance, agriculture storage, crops, etc
- Practices, programme, welfare schemes are also given.
- Block level details related to soil fertility, storage, insurance, training, etc. are available in an interactive map.

## Atal Bhujal Yojana (Atal Jal)

- Atal Bhujal Yojana implemented 8220 Water stressed Gram Panchayats Gujarat, *Haryana*, *Karnataka*, *Madhya Pradesh*, *Maharashtra*, *Rajasthan*, and *Uttar Pradesh*.
- Focus on conservation and smart water management.

## PRADHAN MANTRI KRISHI SINCHAYEE YOJANA (PMKSY)

The Central Government has launched PMKSY during 2015-16.
Vision and objectives:

- Protective irrigation for all agricultural farms in the country.
- Enhance the physical access of water on the farm and expand cultivable area **(*Har khet ko pani*)**
- Introduce sustainable soil and water conservation practices (*Per drop more crop*)

### Haryali watershed development project

- Haryali project sponsored by the *Central Government*.
- Executed by Gram Panchayats with people's participation.
- Aims: Enabling the rural population to conserve water for drinking, irrigation, fisheries and afforestation.

### Highlights of India's National Water Policy 2012

A framework for a plan of action for conservation, development and improved management of water resources of the country.
Salient features are:

- Emphasis on the need for a national water framework law.
- Water for safe drinking water and sanitation, achieving food security, supporting poor people dependent on agriculture for their livelihood and high priority allocation for minimum eco-system needs.
- Adaptation strategies in view of climate change.
- Water footprints, and water auditing be developed to ensure efficient use of water.
- Removal of large disparity for water supply in urban areas and in rural areas.
- Community participation.

### Jal Kranti Abhiyan (2015-16)

- The Jal Kranti Abhiyan launched by the *Government of India in 2015–16*
- To ensure water security through per capita availability of water in the country.
- Involving local bodies, NGOs and citizens, at large, in creating awareness regarding its objectives.
- Selection of one water stressed village in each *672 districts* of the country to create a ***'Jal Gram'*** **-** Parts of the UP, Haryana (North), Karnataka, Telangana, Tamil Nadu (South), Rajasthan, Gujarat (West), Odisha (East), Meghalaya (North-East).
- Water conservation and artificial recharge, reducing groundwater pollution.
- Construction of Arsenic-free wells in selected areas of the country.
- Creating mass awareness.

**'One Nation One Grid'** - Natural gas pipelines laid by GAIL (India).

### Niti Aayog

- India adopted centralized planning after Independence;
- The responsibility of plan formulation was with the Planning Commission at the Centre, State and district levels.
- *1 January 2015*, the Planning Commision was replaced by the *NITI Aayog.*

**The *World's longest Highway tunnel*** — **Atal Tunnel** (9.02 Km) built by Border Road Organisation - connects *Manali* to *Lahaul-Spiti* valley throughout the year.

## BHARATMALA PARIYOJANA

Bharatmala Pariyojana – 'Road' to country's infrastructure development

- ***Golden Quadrilateral*** **(GQ)** - construction of 5,846-km long 4/6 lane to connect India's four big metro cities of Delhi-Mumbai-Chennai Kolkata.
- **North-South corridor -** connecting Srinagar in Jammu and Kashmir with Kanniyakumari in Tamil Nadu (including Cochin-Salem Spur) with 4,076-km long road.

- **The East-West Corridor -** to connect Silchar in Assam with the port town of Porbandar in Gujarat with 3,640-km of road length

**UDAN (Ude Desh ka Aam Nagrik)**

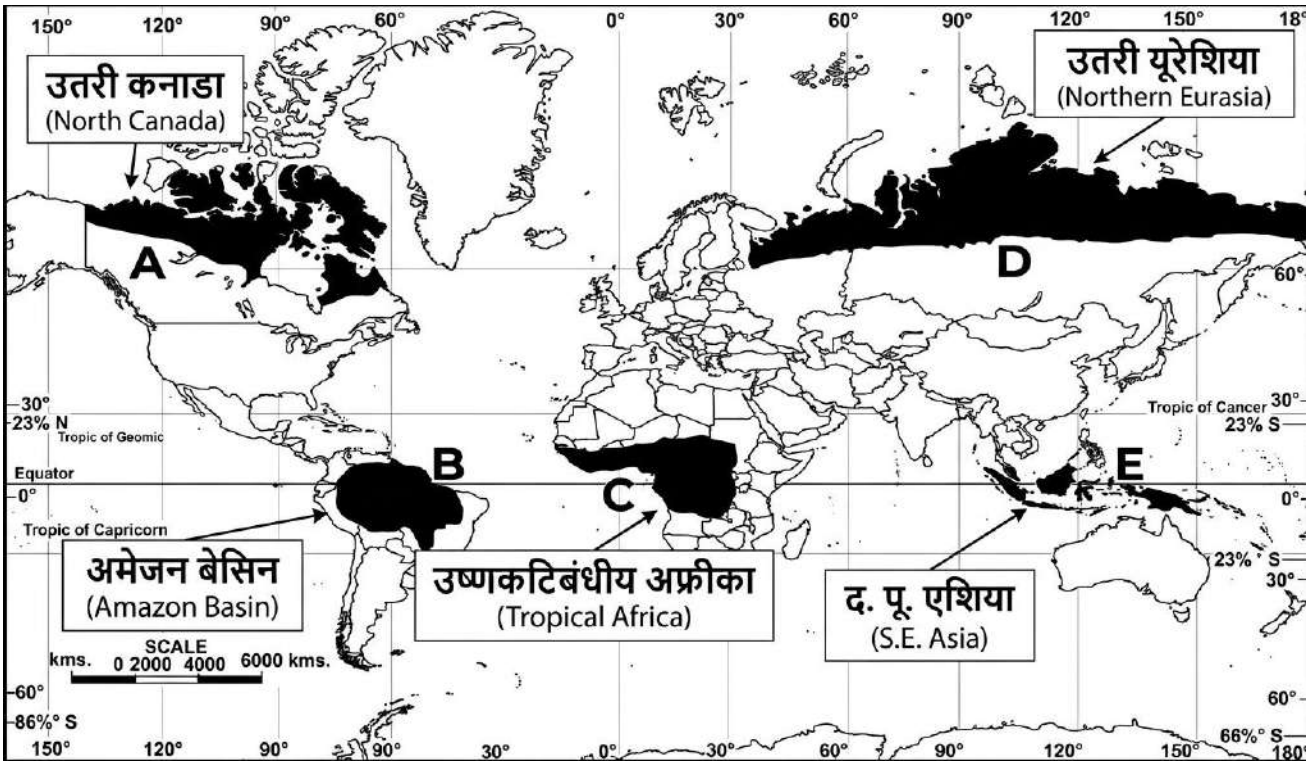
- UDAN was conceived by the Ministry of Civil Aviation (MoCA) Govt. of India, to promote regional connectivity by making fly affordable for the common citizen.
- Under the UDAN scheme, a total number of 73 unserved/underserved airports including 9 Heliports and 2 water aerodromes have been operationalized

**NAMAMI GANGE PROGRAMME**

The Union Government has launched the 'Namami Gange Programme' with the following objectives:
• Developing sewerage treatment systems, monitoring of industrial effluents,
• Development of river front, afforestation, cleaning of the river surface,
• Development of 'Ganga Grams' in Uttarakhand, UP, Bihar, Jharkhand and West Bengal

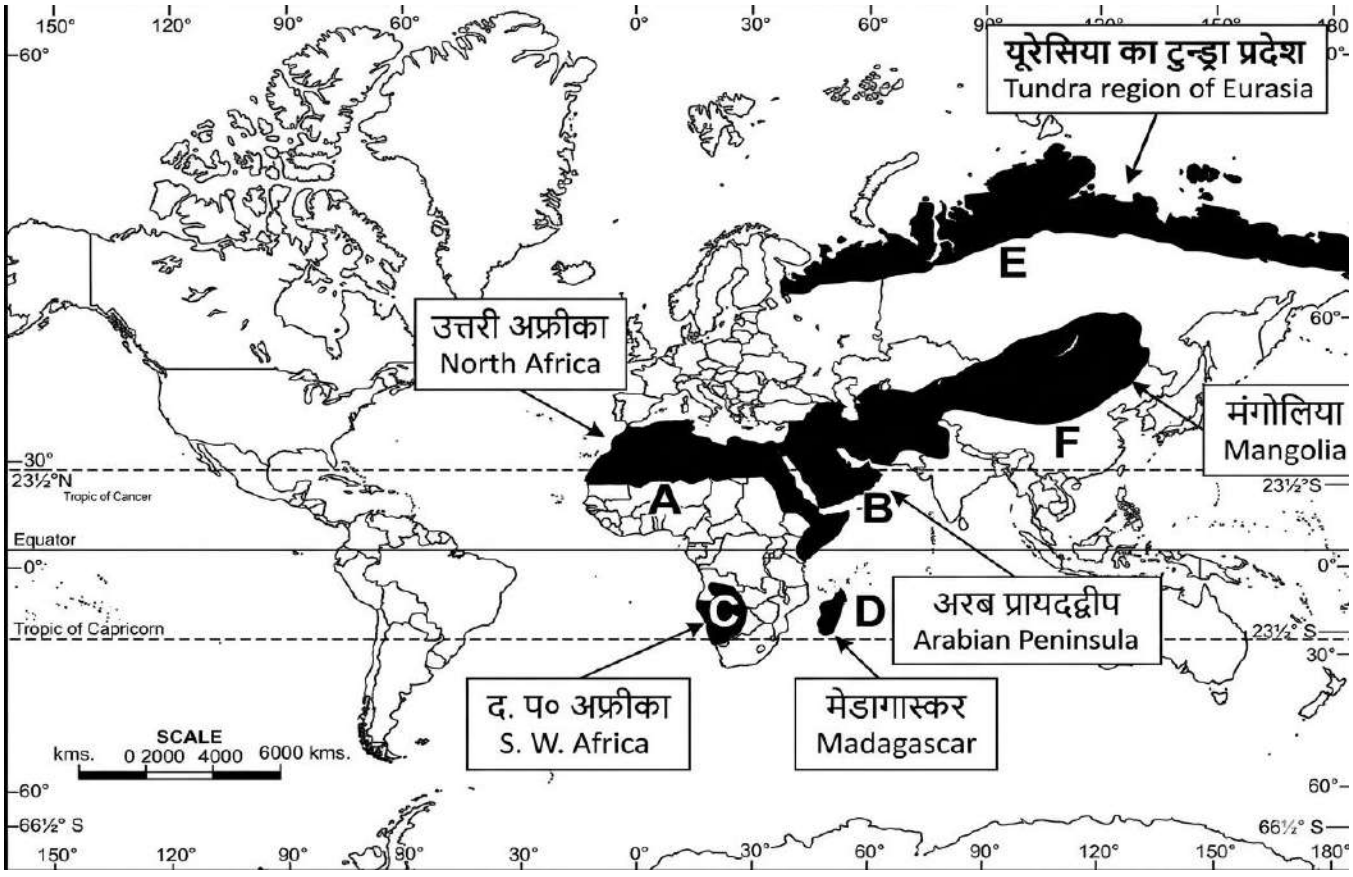
**The Swachh Bharat Mission (SBM)** is part of the urban renewal mission launched by the Government of India to improve the quality of life in urban slums.

**Map Items for identification only on outline political map of the World**

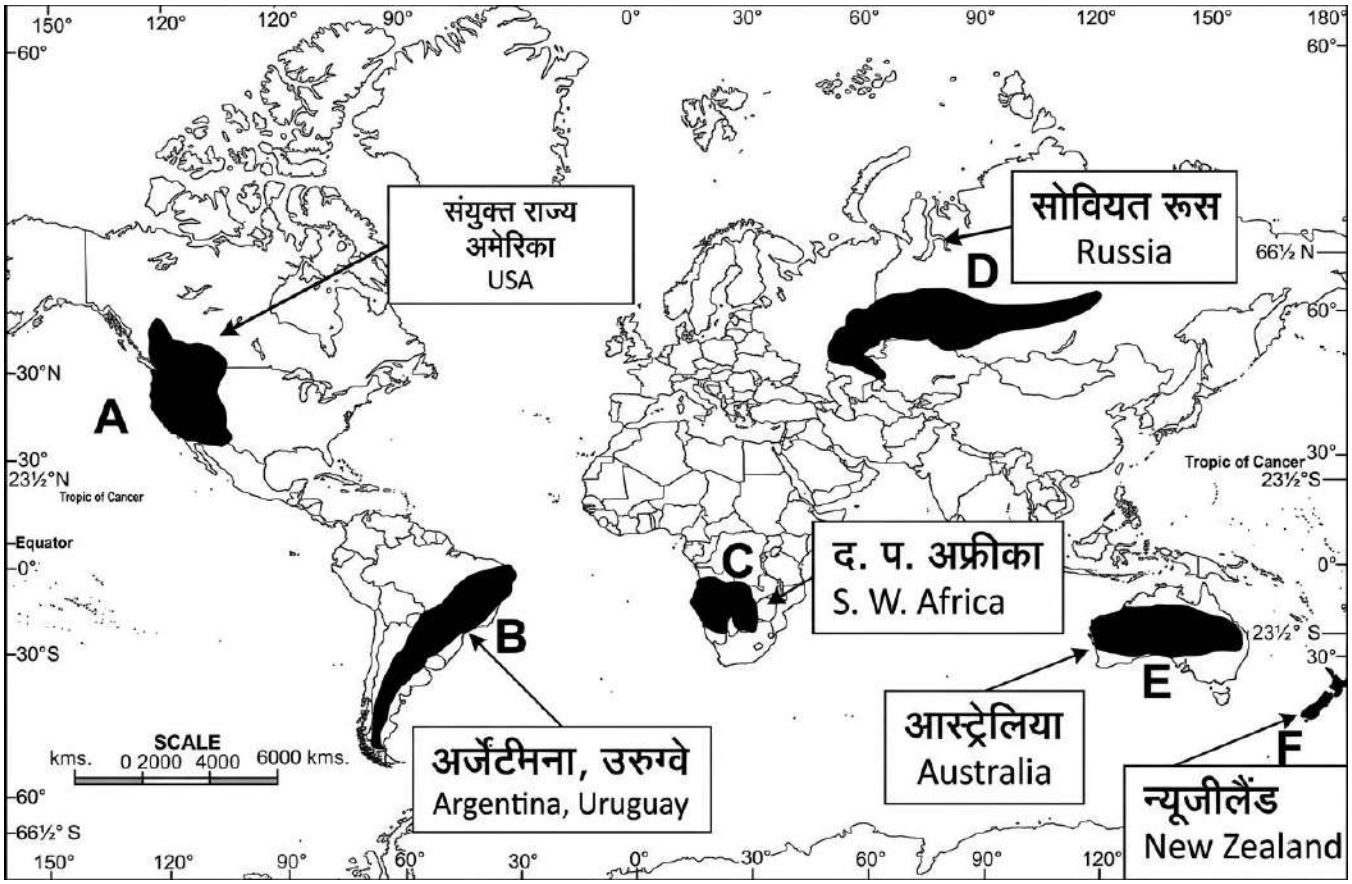



AREAS OF SUBSISTENCE GEATHERING

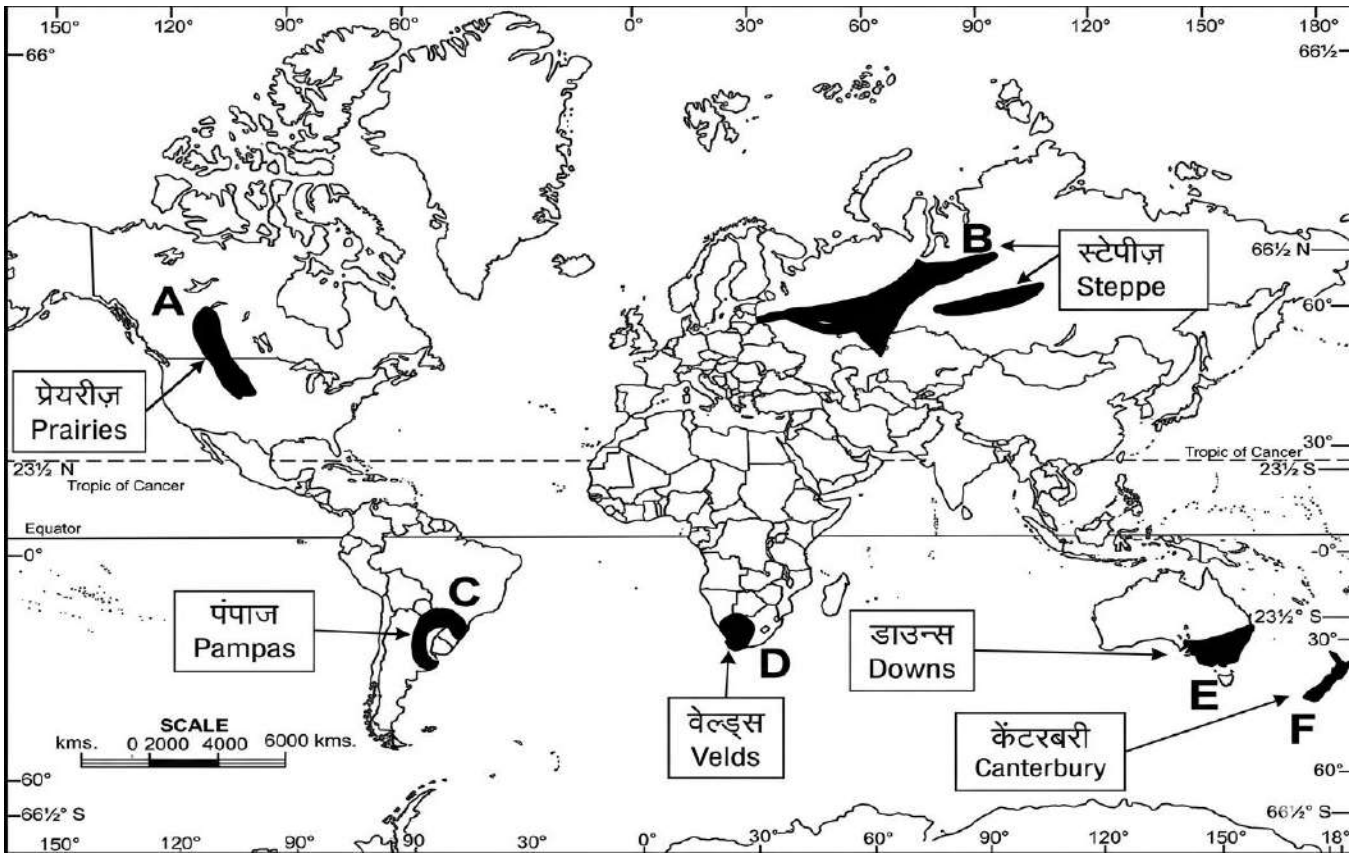
MAJOR AREAS OF NOMADIC HERDING OF THE WORLD



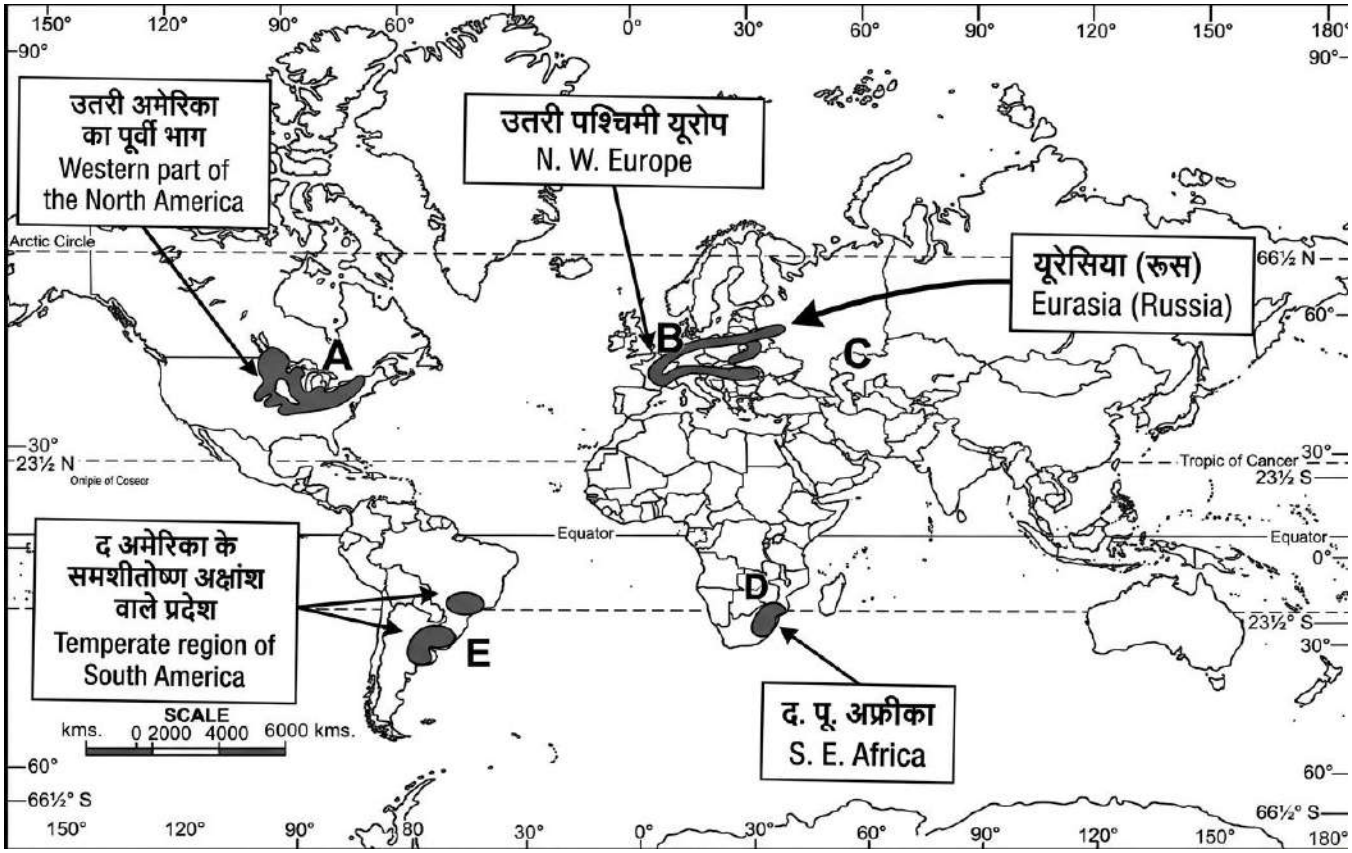
MAJOR AREAS OF COMMERCIAL LIVESTOCK REARING




MAJOR AREAS OF EXTENSIVE COMMERCIAL GRAIN FARMING

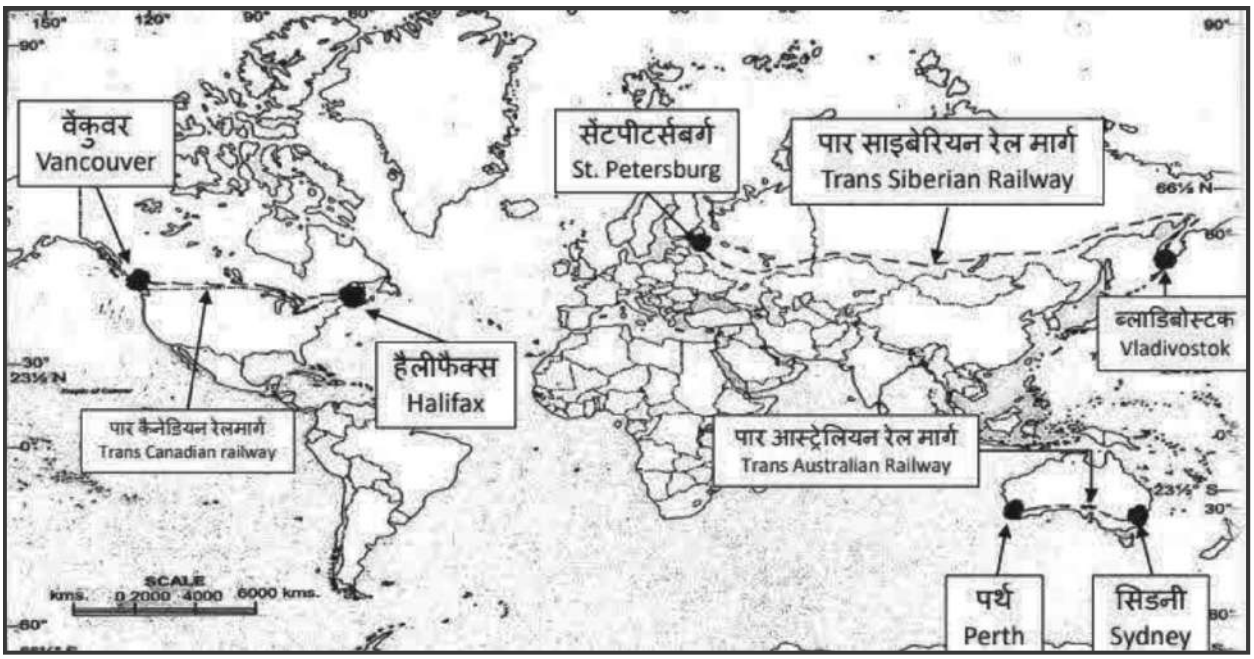


MAJOR AREAS OF MIXED FARMING OF THE WORLD

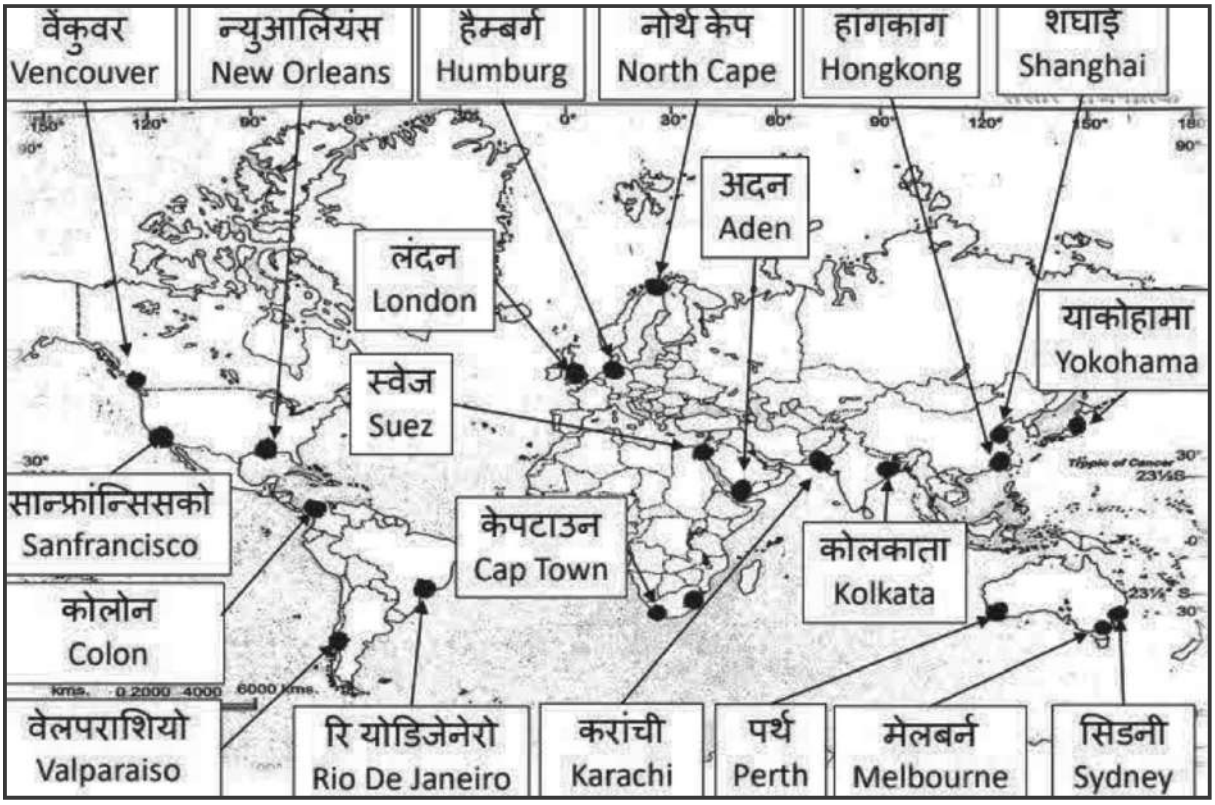



TRANSCONTINENTAL RAILWAYS:

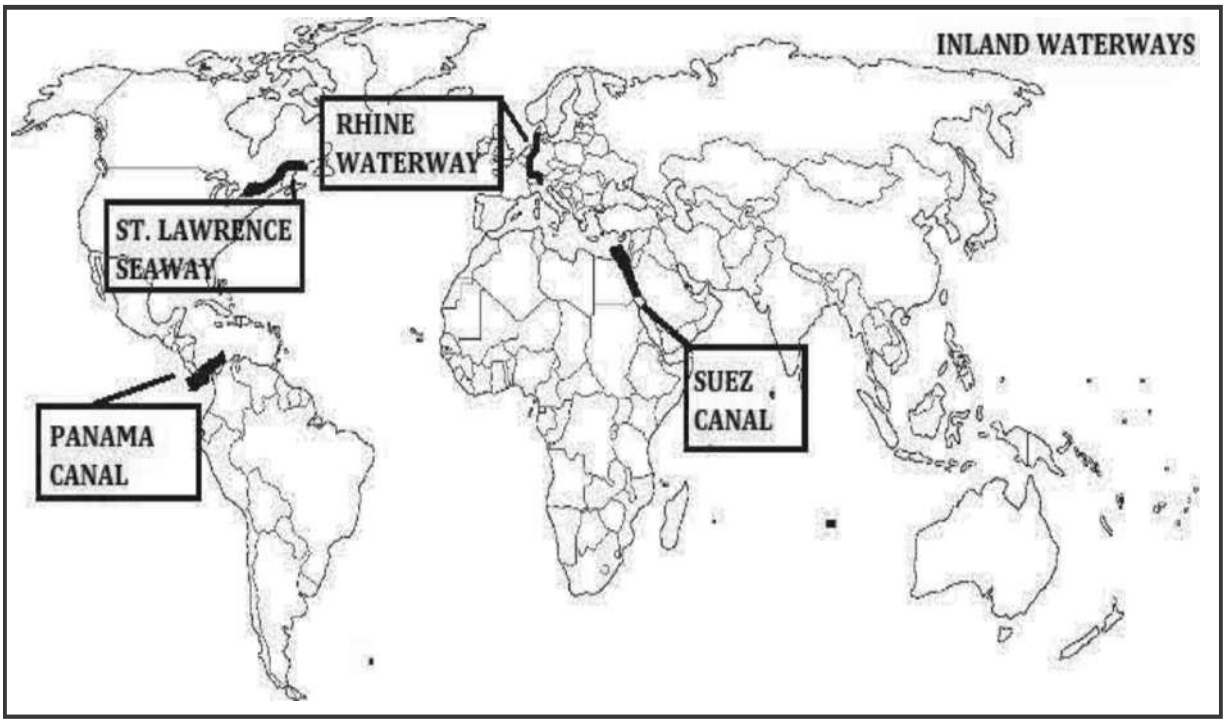
TERMINAL STATIONS OF TRANSCONTINENTAL RAILWAYS



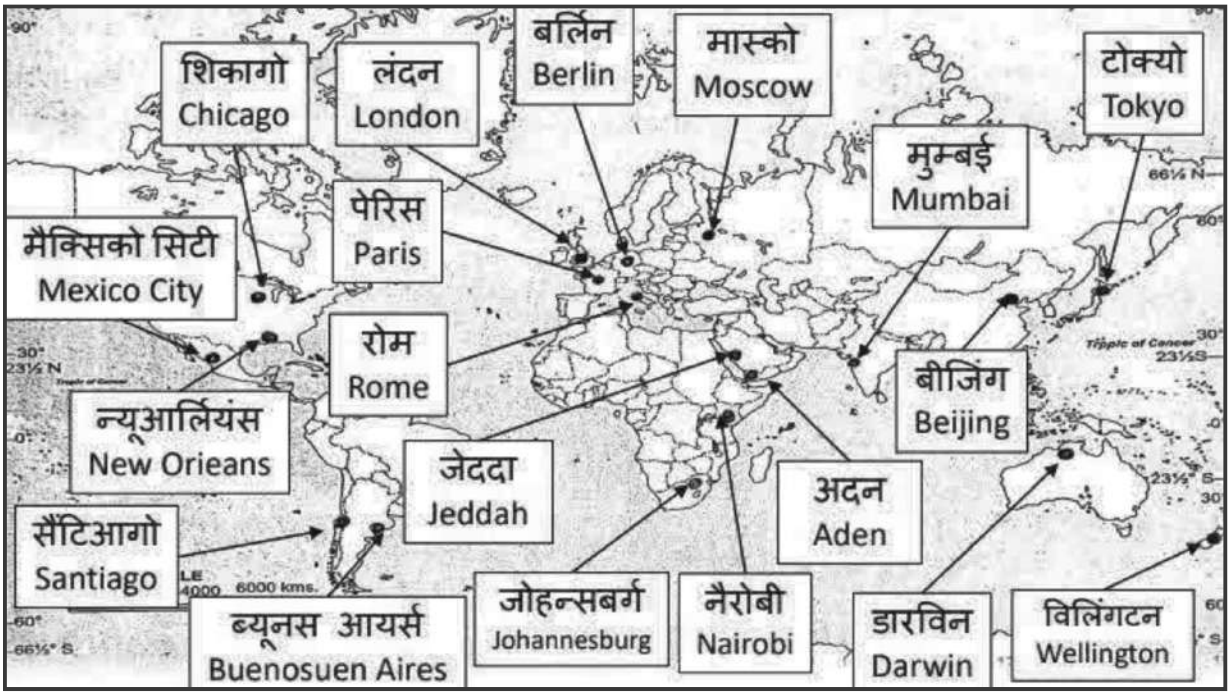
MAJOR SEA PORTS



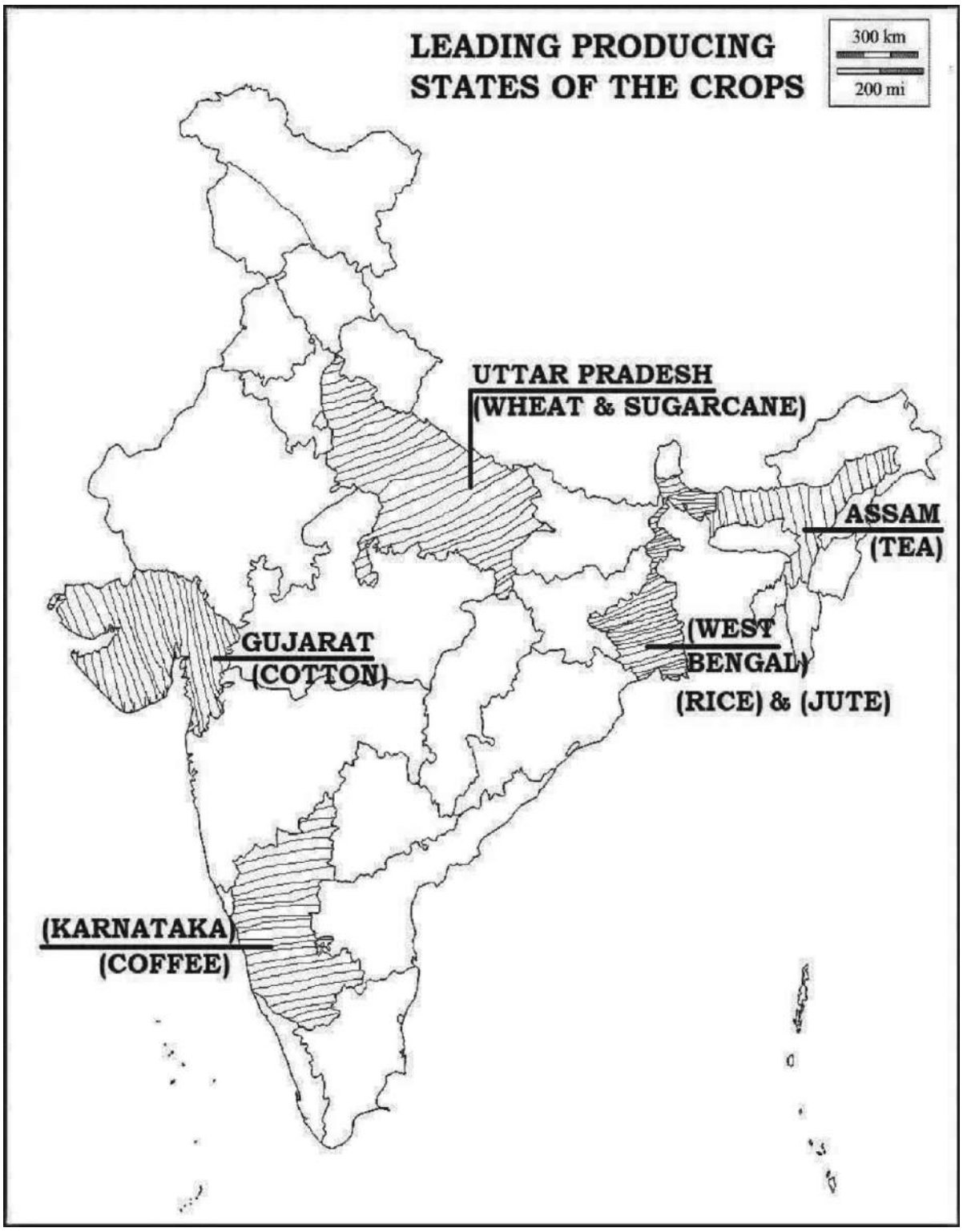

INLAND WATERWAYS

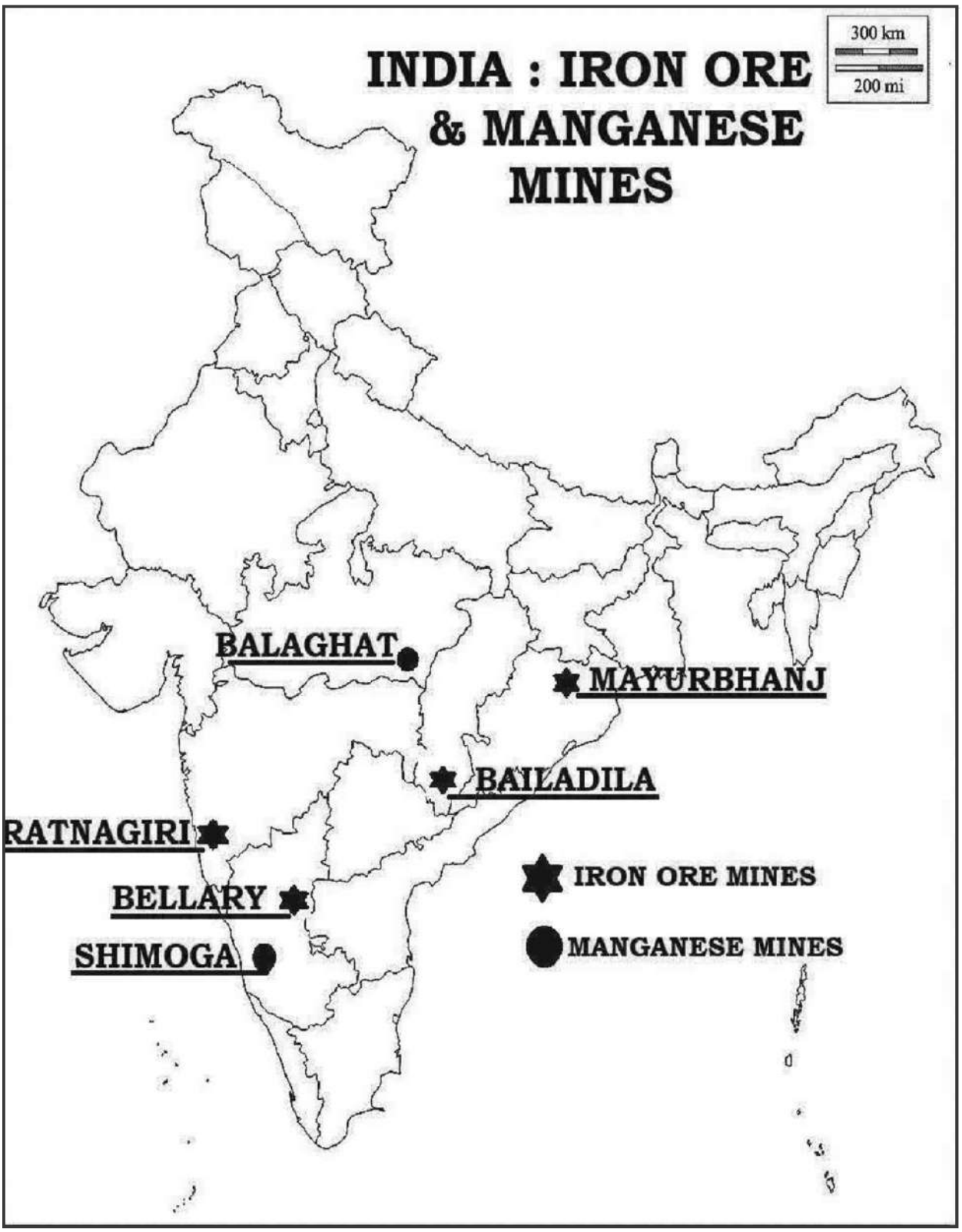


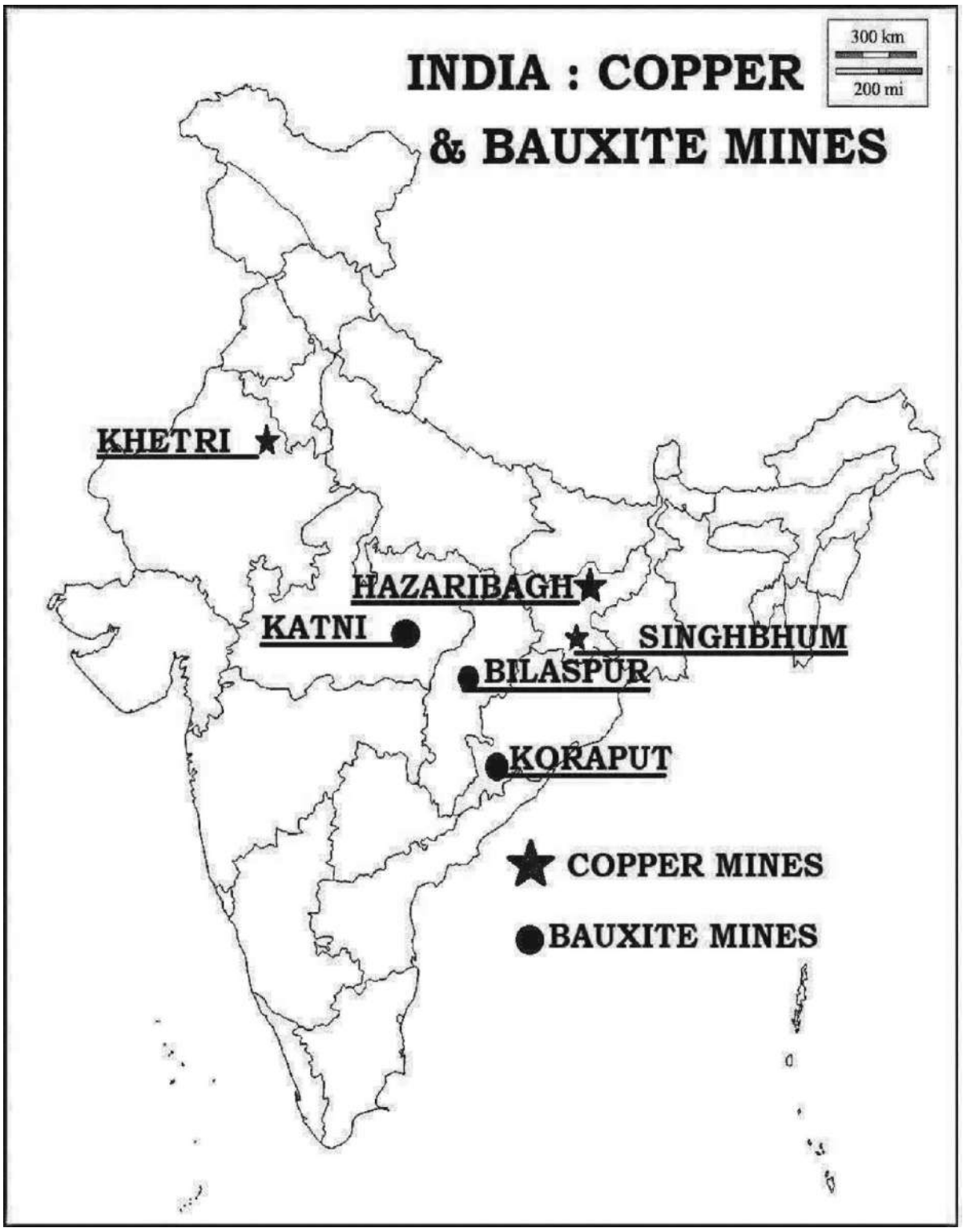
MAJOR AIRPORTS

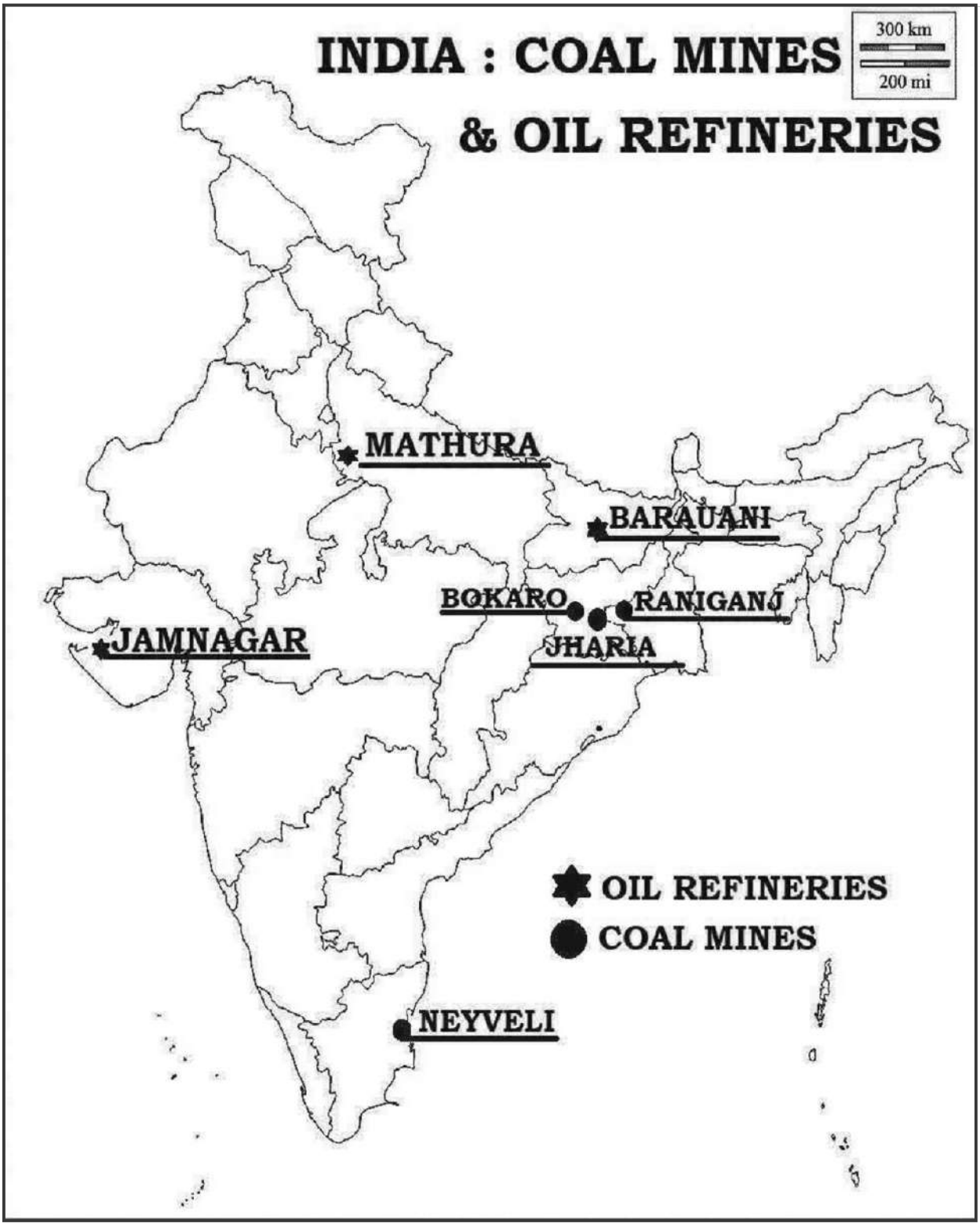


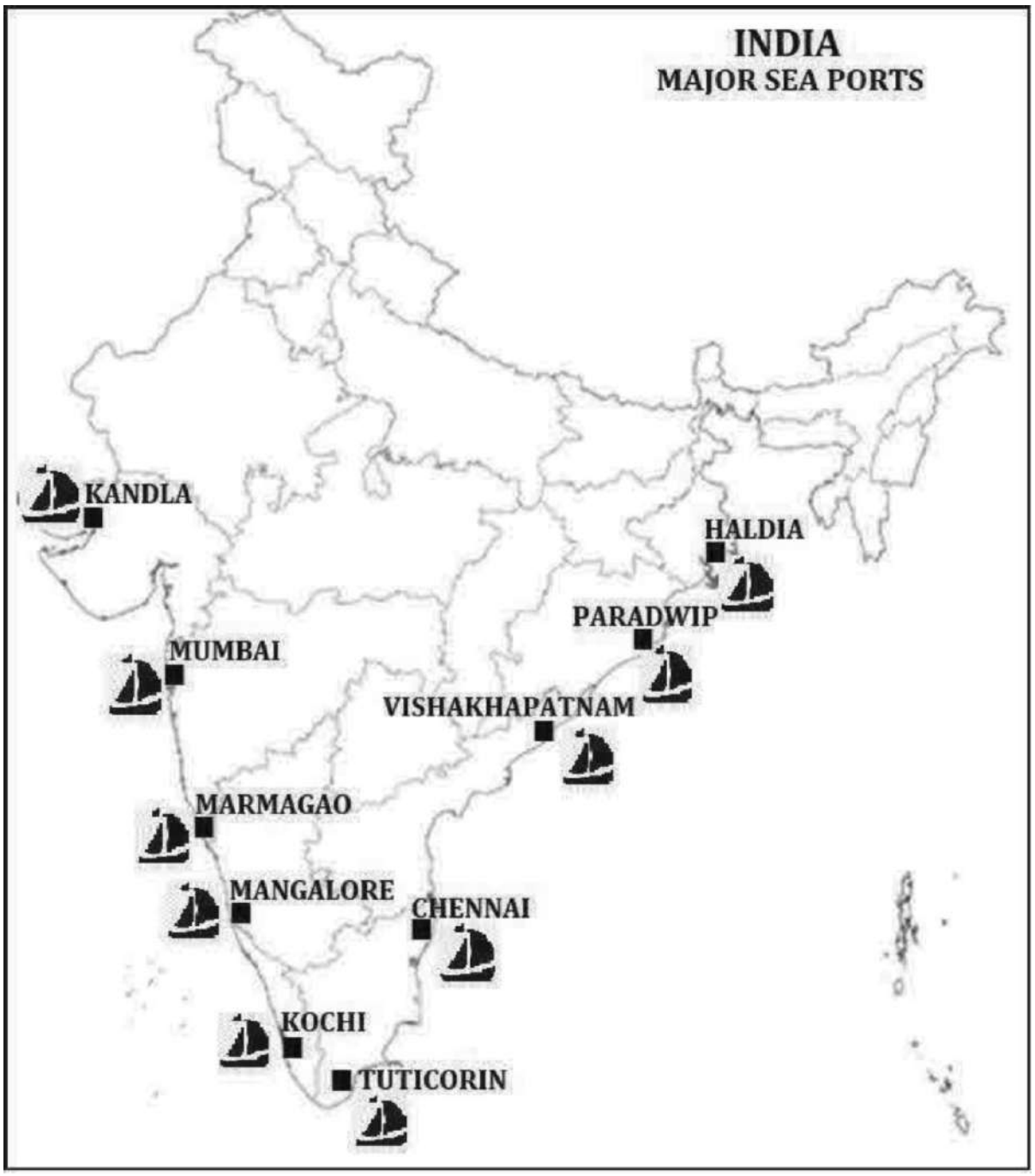

INDIA : POPULATION
(2011)
ARUNACHAL
PRADESH
(STATE WITH LOWEST
POPULATION DENSITY)
BIHAR
(STATE WITH HIGHEST
POPULATION DENSITY)

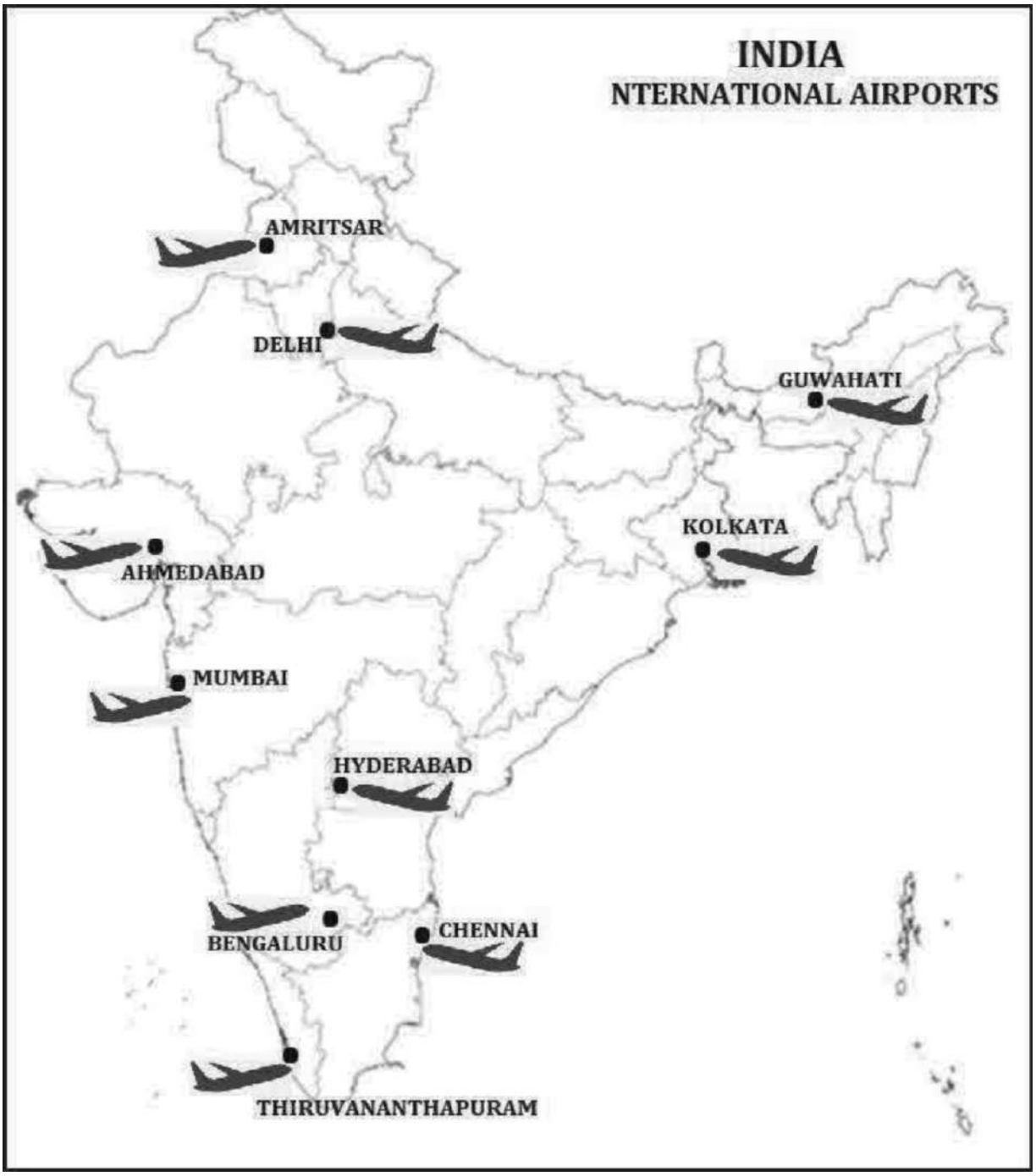

LEADING PRODUCING
STATES OF THE CROPS
300 km
200 mi
UTTAR PRADESH
(WHEAT & SUGARCANE)
ASSAM
(TEA)
GUJARAT
(COTTON)
(WEST
BENGAL)
(RICE) & (JUTE)
(KARNATAKA)
(COFFEE)


INDIA : IRON ORE & MANGANESE MINES
300 km
200 mi
BALAGHAT
MAYURBHANJ
BAILADILA
RATNAGIRI
BELLARY
SHIMOGA
IRON ORE MINES
MANGANESE MINES


INDIA : COPPER
& BAUXITE MINES
300 km
200 mi
KHETRI
HAZARIBAGH
KATNI
SINGHBHUM
BILASPUR
KORAPUT
COPPER MINES
BAUXITE MINES


INDIA : COAL MINES
& OIL REFINERIES
300 km
200 mi
MATHURA
BARAUANI
BOKARO
RANIGANJ
JHARIA
JAMNAGAR
NEYVELI
OIL REFINERIES
COAL MINES


INDIA
MAJOR SEA PORTS
KANDLA
HALDIA
PARADWIP
MUMBAI
VISHAKHAPATNAM
MARMAGAO
MANGALORE
CHENNAI
KOCHI
TUTICORIN

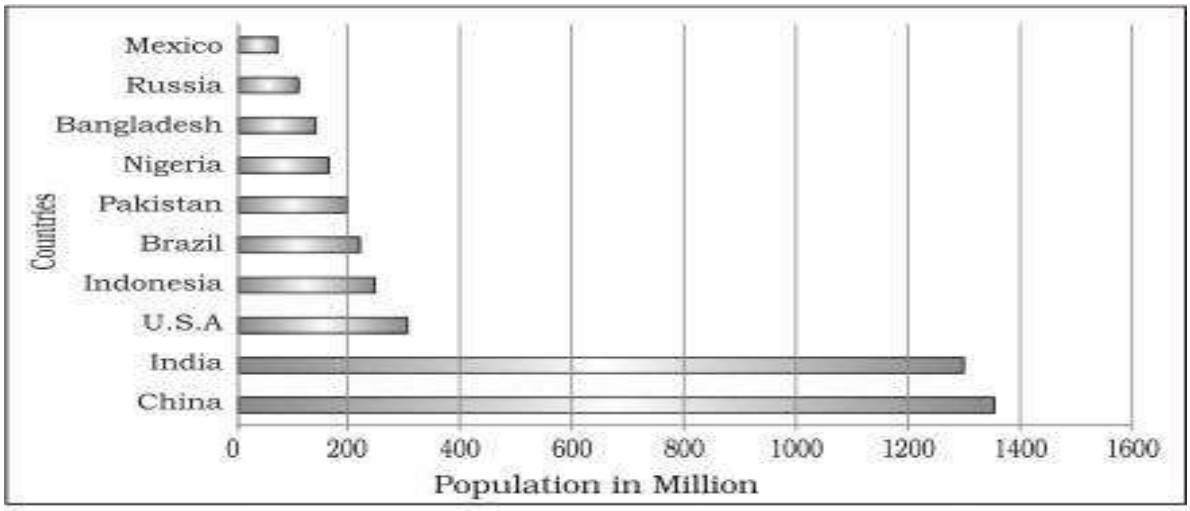

INDIA
NTERNATIONAL AIRPORTS
AMRITSAR
DELHI
GUWAHATI
KOLKATA
AHMEDABAD
MUMBAI
HYDERABAD
BENGALURU
CHENNAI
THIRUVANANTHAPURAM

**CBSE SOLVED QUESTION PAPER-1 2026**
**GEOGRAPHY THEORY (029)**
**Class: XII: 2026**

Time allowed: 3 Hours Maximum marks: 70

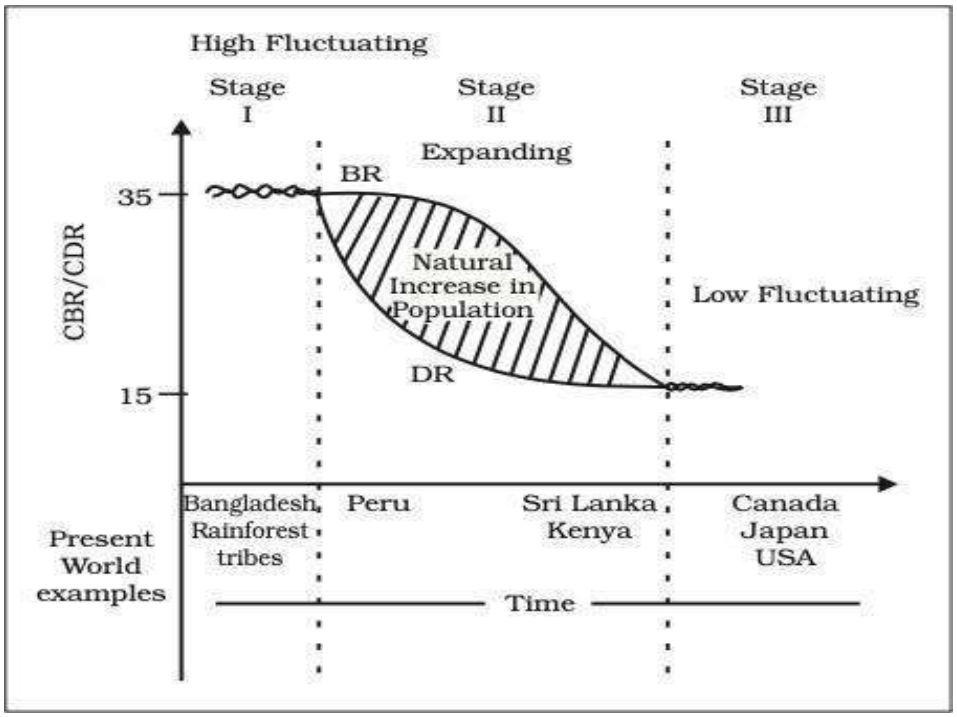
1. Refer to the bar graph displaying the population of various countries. What is the approximate combined population of the three least populous countries shown in the graph?

1




A. 500 million
B. 400 million
C. 300 million
D. 200 million

2. Study the graph given below and answer the following.




A country is currently experiencing low birth rates, low death rates, and a highly urbanized society with advanced

healthcare and industrial infrastructure. Based on the Demographic Transition Theory, this country is most likely in which stage? 1

A. Stage I: High Fluctuating
B. Stage II: Expanding
C. Stage III: Low Fluctuating
D. Pre-Transition Phase

3.Country Y has an HDI of 0.950 and is ranked among the highest in human development. Which of the following policies should it focus on to maintain this status?

A. Increasing industrial output to boost GNI per capita
B. Not investing on infrastructure for healthcare and education
C. Reducing emphasis on education to focus on economic activities
D. Strengthening policies on environmental sustainability and social equity.

4. **Assertion (A):** Population change in an area is an important indicator of economic development, social upliftment, and historical and cultural background of the region. 1

**Reason (R):** The population growth or population change refers to the change in the number of inhabitants of a territory during a specific period of time, which can be expressed in terms of absolute numbers or percentage.

A. Both (A) and (R) are true, and (R) is the correct explanation of (A).
B. Both (A) and (R) are true, but (R) is not the correct explanation of (A).
C. (A) is true, but (R) is false.
D. (A) is false, but (R) is true.

5. Which of the following activities is an example of a quaternary activity? 1

A. Transporting coal from mines to factories via railways
B. A lawyer drafting contracts for corporate clients
C. A salesperson working at a local supermarket
D. A scientist developing genetically modified crops in a research lab

**6.** Match the following policies with the pillar of human development they reflect: 1

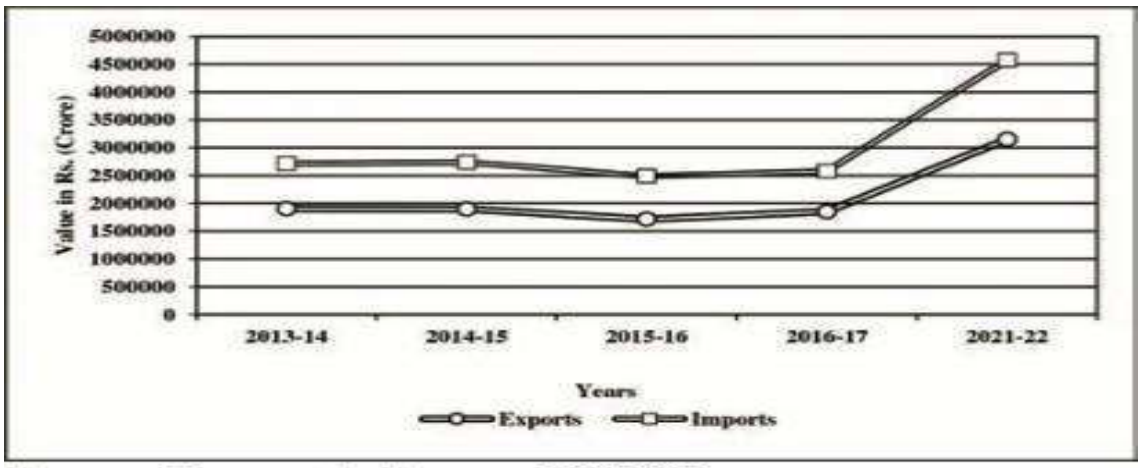
| **Policies/Initiatives** | **Pillar of Human Development** |
|---|---|
| 1. Equal access to education for girls and boys | a. Sustainability |
| 2. Availability of resources for future | b. Equity generations |
| 3. Encouraging participation in local | c. Productivity governance |
| 4. Skill development programs for higher efficiency | d. Empowerment |

A.1-a, 2-b, 3-c, 4-d B. 1-b, 2-a, 3-d, 4-c
C.1-c, 2-d, 3-b, 4-a D. 1-d, 2-c, 3-a, 4-b

7. What is the primary purpose of Regional Trade Blocs? 1

A. To reduce global trade by limiting international exchanges between member nations.
B. To encourage trade between countries with geographical proximity and similar or complementary trading items while reducing trade restrictions in the developing world.
C. To replace global organizations and regulate all international trade activities globally.
D. To enforce trade tariffs between member nations and prevent free trade agreements.

8. The given graph shows the trend of exports and imports (in Rs. Crores) over the years 2013-14 to 2021-22. 1




*Source: Economic Survey 2022-23*

**Based on the graph, which of the following statements is correct?**

A. Imports consistently increased from 2013-14 to 2021-22.

B. Exports and imports were nearly equal in 2016-17.

C. There was no significant change in exports between 2013-14 and 2016-17.

D. Exports showed a sharper increase compared to imports 2016- 17 and 2021-22.

9. The percentage decadal growth rate of India's population declined significantly between 1991-2001 and 2001-2011. If a policymaker wants to maintain a steady growth rate, which of the following strategies would be most effective? 1

A. Encourage higher birth rates to boost population growth.

B. Focus on reducing investment in healthcare.

C. Implement policies to encourage rural-to-urban migration.

D. Promote balanced population growth through family planning and education initiatives.

10. If a region has a high proportion of people aged below 15 years and above 65 years, what challenge is most likely to arise? 1

A. High literacy rate

B. Low dependency ratio

C. Economic strain on the working-age population

D. High participation in the labour force

11. Which of the following was not a measure adopted by the Government of India in the 1990s to promote liberalization and a free-market economy to influence the development of Indian agriculture? 1

A. The creation of the Farmer's Portal to assist with insurance, agricultural storage, crops, seeds, pesticides, market prices, and welfare schemes.

B. Launch of the National Mission for Sustainable Agriculture to enhance productivity, sustainability, and resilience while conserving natural resources.

C. Promotion of organic farming through schemes like Paramparagat Krishi Vikas Yojana (PKVY) and Rashtriya Krishi Vikas Yojana (RKVY).

D. Introduction of high-yielding seed varieties of wheat (Mexico) and rice (the Philippines) in the 1960s and 1970s.

12. Which of the following statements about agricultural land use in India between 1950-51 and 2014-15 is correct based on the table?

| Agricultural Land-use Categories | As a percentage of Reporting Area | | As a percentage of total cultivable land | |
|---|---|---|---|---|
| | 1950-51 | 2014-15 | 1950-51 | 2014-15 |
| Culturable Waste land | 8.0 | 4.0 | 13.4 | 6.8 |
| Fallow other than Current Fallow | 6.1 | 3.6 | 10.2 | 6.2 |
| Current Fallow | 3.7 | 4.9 | 6.2 | 8.4 |
| Net Area Sown | 41.7 | 45.5 | 70.0 | 78.4 |
| Total Cultivable Land | 59.5 | 58.0 | 100.00 | 100.00 |

A. The percentage of culturable waste land as part of the reporting area decreased from 8.0% to 4.0%.
B. The net area sown as a percentage of total cultivable land decreased from 78.4% to 70.0%.
C. The percentage of current fallow land as part of the reporting area decreased from 4.9% to 3.7%.
D. The total cultivable land as a percentage of the reporting area increased from 58.0% to 59.5%.

13. Which of the following statements correctly describe the objectives of the Pradhan Mantri Krishi Sinchayee Yojana (PMKSY)? 1

1. To promote the exclusive use of traditional irrigation methods in rain-fed areas.
2. To ensure access to protective irrigation for all agricultural farms and expand cultivable areas under assured irrigation.
3. To integrate water resources, distribution, and efficient usage through technologies like "Per Drop More Crop."
4. To introduce sustainable water conservation practices and improve on-farm water use efficiency.

A. 1 and 3 only
B. 2, 3, and 4 only
C. 1, 2, and 4 only
D. 1, 2, 3 and 4

14. As a policymaker, tasked with fostering behavioural changes in the community to shift from a prevailing attitude of consumption to one focused on conservation and smart water management, which of the following programs would you prioritize for implementation?

1

A. Arvary Pani Sansad
B. Atal Bhujal Yojana
C. National Water Policy, 2012
D. Jal Kranti Abhiyan

15. **Assertion (A):** Bio-energy is a sustainable and versatile source of energy that can be converted into electrical energy, heat energy, or gas for cooking.

**Reason (R):** Bio-energy not only processes waste and garbage to produce energy but also reduces environmental pollution, enhances self-reliance, and improves the economic life of rural areas in developing countries.

**Options:**
A. Both Assertion (A) and Reason (R) are true, and Reason (R) is the correct explanation of Assertion (A).
B. Both Assertion (A) and Reason (R) are true, but Reason (R) is not the correct explanation of Assertion (A).
C. Assertion (A) is true, but Reason (R) is false.
D. Assertion (A) is false, but Reason (R) is true

16. Match the mode of transport with its description:

| Column A (Mode of Transport) | Column B (Description) |
|---|---|
| a. Airways | 1. Suitable for heavy goods over land but Limited to connected regions. |
| b. Roadways | 2. Capable of carrying large volumes of heavy goods at a lower cost. |
| c. Railways | 3. Flexible setup and rapid delivery for high- |

low-volume goods.

| | |
|---|---|
| d. Waterways | 4. Widely accessible and easy to use for short-distance trade and delivery. |

A. a-3, b-4, c-1, d-2
B. a-2, b-3, c-4, d-1
C. a-1, b-2, c-3, d-4
D. a-4, b-1, c-2, d-3

17. UDAN (Ude Desh ka Aam Nagrik) is a first-of-its kind scheme globally, designed to jump- start the regional aviation market. Regional Connectivity Scheme (RCS) -UDAN was conceived by the Ministry of Civil Aviation (MoCA) Govt. of India, to promote regional connectivity by making fly affordable for the common citizen.

The central idea of UDAN is

A.To encourage airlines to operate flights on regional and remote routes through enabling policies and extending incentives.
B.To ensure the development of world-class international airports in metropolitan cities.
C.To provide subsidies to private airlines for expanding their global flight operations.
D.To improve air cargo infrastructure to support trade and export activities in rural areas.

**Section-B**

18. The concept of neo determinism was put forward by Griffith Taylor in 1920. The concept shows that neither is there a situation of absolute necessity (environmental determinism) nor is there a condition of absolute freedom (possibilism). It means that human beings can conquer nature by obeying it. They have to respond to the red signals and can proceed in their pursuits of development when nature permits the modifications. It means that possibilities can be created within the limits which do not damage the environment and there is no free run without accidents. The free run which the developed economies attempted to take has already resulted in the greenhouse effect, ozone layer depletion, global warming, receding glaciers and degrading lands. (1+1+1=3)

i. Who proposed the concept of neo-determinism?
ii. How did Taylor view the relationship between nature and a country's economic program?
iii. Why neo determinism has become quite relevant in the present- day context?

**19. Read the given passage carefully and answer the questions that follows**:

The concept of human development was introduced by Dr Mahbub-ul- Haq. Dr Haq has described human development as development that enlarges people's choices and improves their lives. People are central to all development under this concept. These choices are not fixed but keep on changing. The basic goal of development is to create conditions where people can live meaningful lives.

The human development index (HDI) ranks the countries based on their performance in the key areas of health, education and access to resources. These rankings are based on a score between 0 to 1 that a country earns from its record in the key areas of human development.

The ways to measure human development are constantly being refined and newer ways of capturing different elements of human development are being researched. Researchers have found links between the level of corruption or political freedom in a particular region.

India ranks 132 out of 191 countries in the Human DevelopmentIndex (HDI) 2021, after registering a decline in its score over two consecutive years for the first time in two decades.

The 2023 HDI stands at a new high following steep decline during 2020 and 2021 due to the COVID-19 pandemic, according to the 2023-24 Human Development Report released by the United Nations Development Programme (UNDP) on March 13, 2024.

The report found that rich countries experienced unprecedented development. But half of the world's poorest nations continued to languish below their pre-COVID crisis levels.

The 2023-24 Human Development Report identified Switzerland, Norway, and Iceland as leading the national human development indices, while the Central African Republic, South Sudan, and Somalia lagged the furthest behind. (1+1+1=3)

(i)What does the Human Development Index (HDI) measure according to the source?

(ii)What significant trend did the 2023 HDI report highlight regarding the world's poorest nations?

(iii)Which three countries were ranked highest in the 2023 Human Development Index?

## Section-C

20. Explain how outsourcing has impacted both the countries that outsource work and the countries receiving outsourced jobs. 3

21. How can we promote sustainable urban development while addressing challenges like pollution, resource scarcity, and congestion in growing cities and new towns? 3

22. Identify and explain three measures that urban planners can adopt to address urban transportation challenges, including congestion, pollution, and inefficiency. 3

23. Discuss the key features of population growth in India during the period 1951–1981 including the main reasons for the rapid population increase during this phase? 3

OR

Who are adolescents? Why are they considered important in the population? What are the challenges faced by society in dealing with adolescents? 1+1+1=3

## Section- D

24. Explain how pastoral nomadism is an adaptation to specific geographical conditions. Illustrate your answer with examples from different regions of the world. 5

OR

"Mining has played a significant role in human development, especially since the Industrial Revolution." In view of the statement, discuss the factors affecting mining activities. What are the economic and social impacts of mining on developed and developing countries, and how do these impacts differ based on their levels of industrialization and labour dynamics? 2+3=5

25. How have countries like India, China, Brazil and Indonesia benefitted from the development of small-scale industries? What are technopolies? Give two examples. 3+2=5

OR

Discuss with examples, any five factors that influence industrial location. 5

26. Explain the problems faced by slum dwellers in urban areas. How do these problems impact their quality of life? 3+2=5

OR

"Noise pollution has emerged as a serious problem despite being location specific." Analyse the statement and explain. 5

27. Study the table showing the composition of India's exports since 2015-2021 and answer the question. 5

*(Percentage share in Exports)*

| Commodities | 2015-16 | 2016-17 | 2020-21 | 2021-22 |
|---|---|---|---|---|
| Agriculture and allied products | 12.6 | 12.3 | 14.3 | 11.9 |
| Ore and Minerals | 1.6 | 1.9 | 3.2 | 2.0 |
| Manufactured goods | 72.9 | 73.6 | 71.2 | 67.8 |
| Crude and petroleum products | 11.9 | 11.7 | 9.2 | 16.4 |
| Other commodities | 1.1 | 0.5 | 2.1 | 1.9 |

*Source : Economic Survey 2016-17 and 2022-23*

How have the composition and trends in India's exports evolved since 2015-16? Highlight five key changes.

28. Formulate a development plan for the Bharmaur tribal region under the Integrated Tribal Development Project (ITDP), focusing on improving agriculture, education, and livelihood opportunities, considering the region's climatic conditions, socio-economic challenges, and potential for sustainable development. 5

OR

The development of the Indira Gandhi Canal Command area has led to the degradation of the physical environment there. Suggest five measures to promote ecological sustainability in the Indira Gandhi Canal Project. 5

## Section-E

**29. On the given political map of the World, seven geographical features have been marked as A, B, C, D, E, F and G.Identify any five with the help of the following information and write their correct names.**

A. Name a major seaport of Europe.
B. Name an important seaport located in South Africa.
C. Name the canal that connects Atlantic Ocean and Pacific Ocean
D. Name an area of subsistence gathering in South America.
E. Name one major airport of South America.
F. Name the easternmost terminal station of Trans-Siberian Railway.
G. Name the area of extensive commercial grain agriculture in Australia.

**The following questions are for Visually Impaired Candidates only in lieu of Question No.29. Answer any five questions out of the following:**

A. A major seaport of Europe.
B. An international seaport in South Africa.
C. An important waterway of Europe.
D. An area of subsistence gathering in South America.
E. An important airport of South America.
F. A terminal station of Trans-Siberian Railway.
G. Region of extensive commercial grain agriculture in Australia.

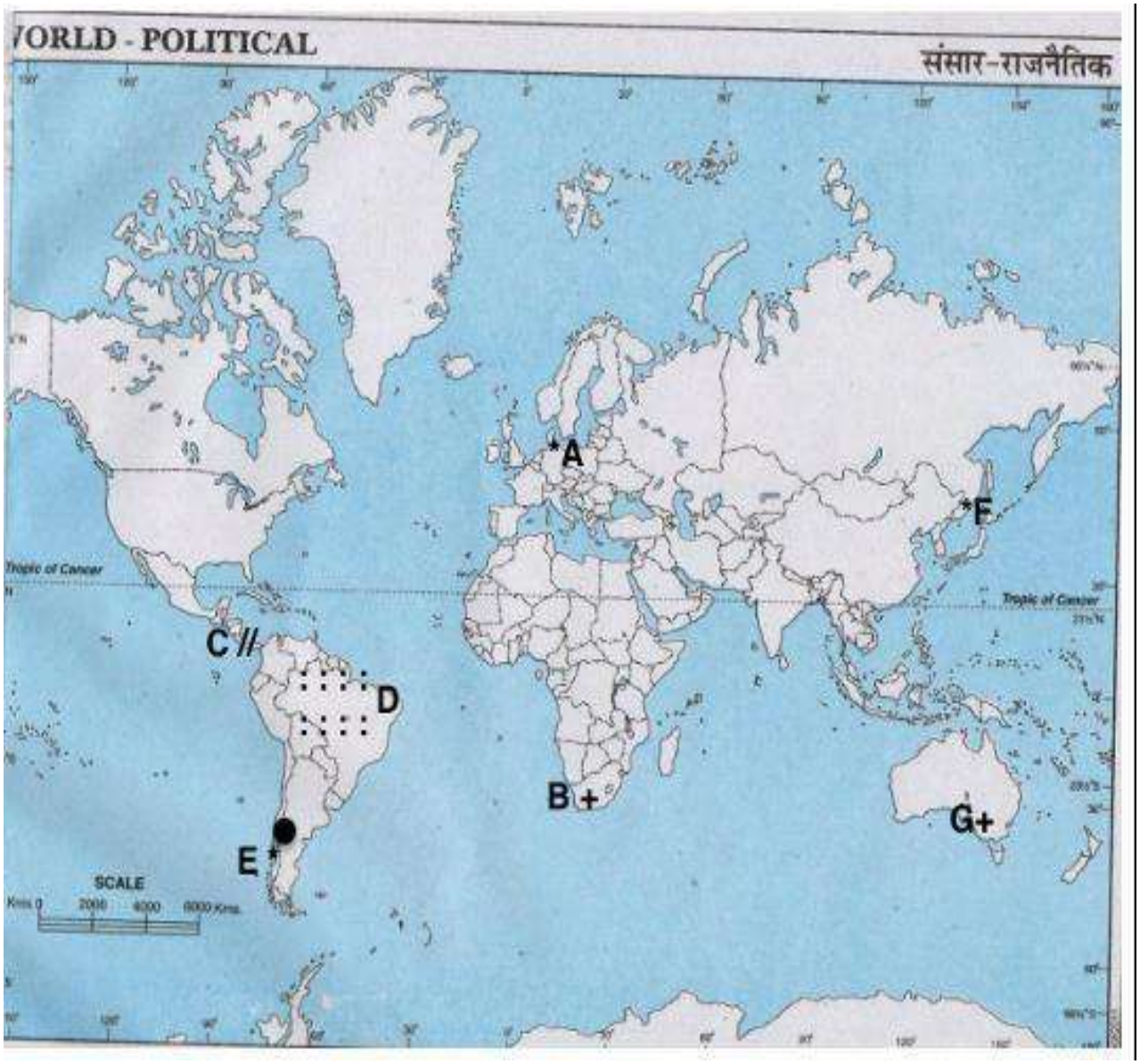
**30. Locate and label any five of the following geographical features on the Political Outline map of India with appropriate symbols:**

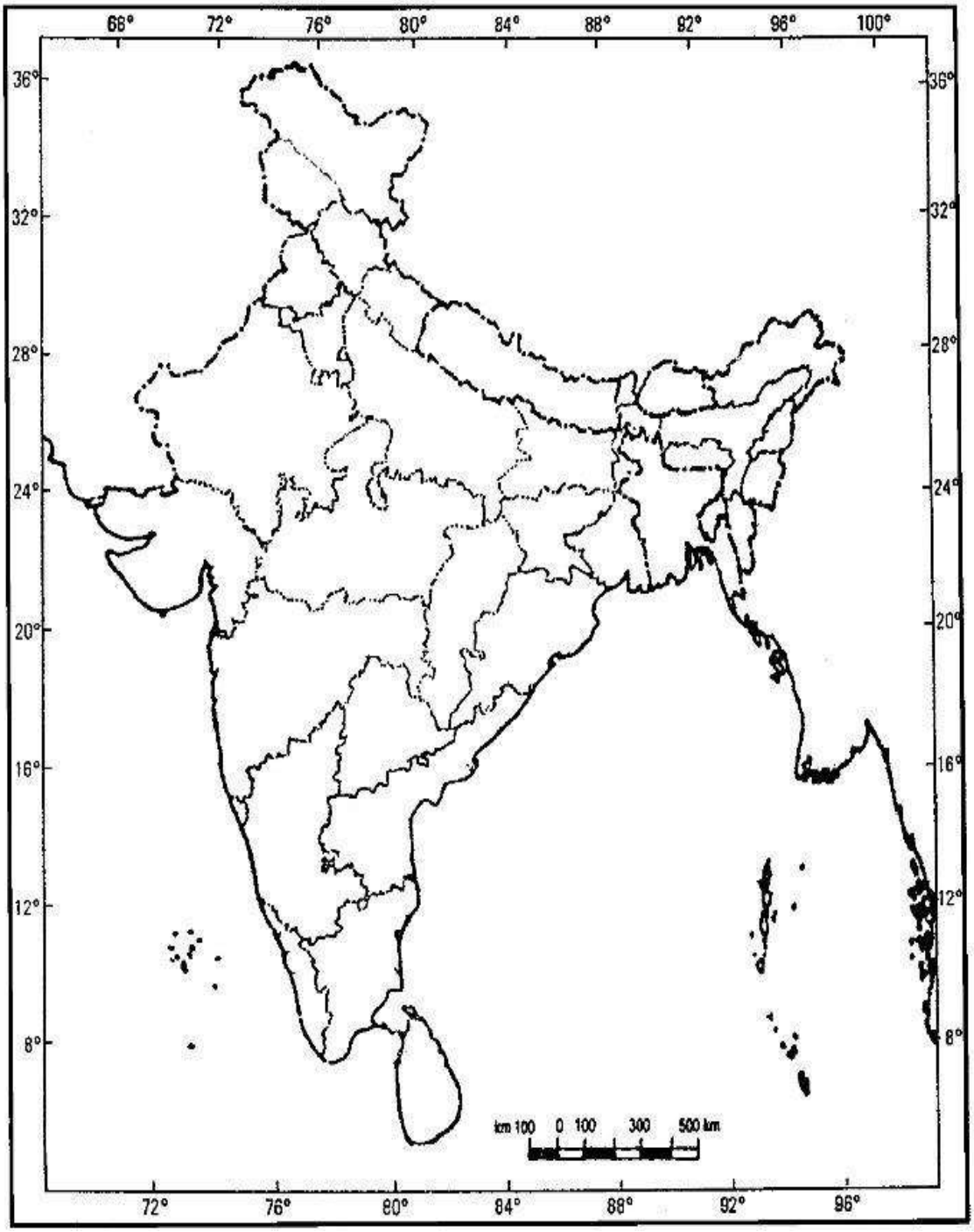
A. An important iron ore mine in Odisha.
B. Southernmost seaport of India
C. An oil refinery in Gujarat
D. The state with highest population density.
E. The state leading in the production of tea
F. An international airport in Karnataka.
G. An important coal mine in West Bengal

**The following questions are for visually impaired students in lieu of Question No.30. Attempt any five.**

A. Name an important iron ore mine in Odisha
B. Name southernmost seaport of India

C. Name an oil refinery in Gujarat
D. Name the state with highest population density.
E. Name one leading cotton producing state of India.
F. Name the international airport of Karnataka
G. Name an important coal mine of West Bengal




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**MARKING SCHEME** **CLASS: XII**
**Time allowed: 3 Hour** **Maximum marks: 70**
**General Instructions:**

1. B. 400 Million 1
2. C. Stage III: Low Fluctuating. 1
3. D. Strengthening policies on environmental sustainability and social equity 1
4. B. Both (A) and (R) are true, but (R) is not the correct explanation of (A). 1
5. D. A scientist developing genetically modified crops in a research lab 1
6. B. 1-b, 2-a, 3-d, 4-c 1
7. B. To encourage trade between countries with geographical proximity and similar or complementary trading items while reducing trade restrictions in the developing world. 1
8. C. There was no significant change in exports between 2013-14 and 2016-17. 1
9. D. Promote balanced population growth through family planning and education initiatives.1
10. C. Economic strain on the working-age population 1
11. D. Introduction of high-yielding seed varieties of wheat (Mexico) and rice (the Philippines) in the 1960s and 1970s. 1
12. A. The percentage of culturable waste land as part of the reporting area decreased from 8.0% to 4.0%. 1
13. B. 2, 3, and 4 only 1
14. B. Atal Bhujal Yojana 1
15. A. Both Assertion (A) and Reason (R) are true, and Reason (R) is the correct explanation of Assertion (A). 1
16. A. a-3, b-4, c-1, d-2 1
17. A. To encourage airlines to operate flights on regional and remote routes through enabling policies and extending incentives. 1
18. (i)Griffith Taylor 1

(ii) Human beings can conquer nature by obeying it. They have to respond to the red signals and can proceed in their pursuits of development when nature permits the modifications. It means that possibilities can be created within the limits which do not damage the environment and there is no free run without accidents. The neo-determinism conceptually attempts to bring a balance nullifying the 'either' 'or' dichotomy. 1

(iii)The free run which the developed economies attempted to take has already resulted in the greenhouse effect, ozone layer depletion, global warming, receding glaciers and degrading lands.1

19.(i)The HDI measures a country's Gross National Income per capita, education, and life expectancy. 1

(ii)The report highlighted that half of the world's poorest nations continued to remain below their pre-COVID crisis levels. 1

(iii)The three highest-ranked countries in the 2023 HDI were Switzerland, Norway, and Iceland. 1

20. ●Impact on Outsourcing Countries: Outsourcing has led to job creation in countries like India, China, and the Philippines, offering cheaper labour and skilled workers. However, it has also faced resistance from job-seeking youths in these countries.

- Comparative Advantage: The low cost and availability of skilled labour in outsourcing countries provide a comparative advantage, making outsourcing a viable business option.
- Migration Trends: Outsourcing has reduced the outmigration from countries where jobs are available, as new opportunities lower the need for people to seek work abroad.
- Emergence of KPO: Knowledge Process Outsourcing (KPO) involves highly skilled workers and has become a new trend in outsourcing. It focuses on research, e-learning, legal services, and other high-skill areas, creating additional business opportunities.

(Any 3 points or any other relevant point) 3

21. Elaborate any six points

1) Adopting Smart Urban Planning
2) Enhancing Public Transportation
3) Implementing Green Infrastructure
4) Promoting Renewable Energy and Energy Efficiency
5) Managing Resources Sustainably
6) Addressing Pollution
7) Community Engagement and Education 3

22.(1) Improved Public Bus Service: By providing more efficient and reliable public transportation, cities can encourage people to choose buses over personal vehicles, reducing congestion and pollution.
(2) Expressways: Building expressways with separate traffic lanes, bridges, and flyovers can help ensure smoother traffic flow and reduce congestion in cities.
(3) Mass Rapid Transit (MRT): Implementing MRT systems can provide high-capacity, efficient transportation like electric trains, underground tunnels, metros and elevated railways within cities, reducing dependence on cars or other personal vehicles and reduce congestion and pollution.
(4) Higher Parking Fees: Increasing parking fees can discourage the use of personal vehicles for commuting, encouraging people to utilize public transport or other alternatives. 3

(Any three points or any other relevant point)

23.The decades 1951-1981 are referred to as the period of "population explosion" in India, which was caused by-
●A rapid fall in the mortality rate but a high fertility rate of population in the country. The average annual growth rate was as high as 2.2 per cent.
●It is in this period, after the Independence, that developmental activities were introduced through a centralised planning process and economy started showing up ensuring the improvement of living condition of people at large. Thus, there was a high natural increase and higher growth rate.
●Besides, increased international migration bringing in Tibetans, Bangladeshis, Nepalies and even people from Pakistan contributed to the high growth rate.

OR

Adolescents i.e., up to the age group of 10-19 years consists of about 20.9 per cent (2011). Adolescents form a significant portion of the population, contributing to the workforce and economy in the future.
The adolescent population, though, regarded as the youthful population having high potentials, but at the same time they are quite vulnerable if not guided and channelised properly. There are many challenges for the society as far as these adolescents are concerned, some of which are lower age at marriage, illiteracy – particularly female illiteracy, school dropouts, low intake of nutrients, high rate of maternal mortality of adolescent mothers, high rate of HIV and AIDS infections, physical and mental disability or retardedness, drug abuse and alcoholism, juvenile delinquency and commitence of crimes, etc.
3

24. Pastoral nomadism or Nomadic herding is a primitive subsistence activity, in which the herders rely on animals for food, clothing, shelter, tools and transport. They move from one place to another along with their livestock, depending on the amount and quality of pastures and water. Each nomadic community occupies a well- identified territory as a matter of tradition.
A wide variety of animals is kept in different regions. In tropical Africa, cattle are the most important livestock, while in Sahara and Asiatic deserts, sheep, goats and camel are reared. In the mountainous areas of Tibet and Andes, yak and llamas and in the Arctic and sub Arctic areas, reindeer are the most important animals.
The process of migration from plain areas to pastures on mountains during summers and again from mountain pastures to plain areas during winters is known as transhumance. In mountain regions, such as Himalayas, Gujjars, Bakarwals, Gaddis and Bhotiyas migrate from plains to the mountains in summers and to the plains from the high altitude pastures in winters. Similarly, in the tundra regions, the nomadic herders move from south to north in summers and from north to south in winters.

OR

Factors Affecting Mining Activity:
i.Physical factors include the size, grade and the mode of occurrence of the deposits.
ii.Economic factors such as the demand for the mineral, technology available and used, capital to develop infrastructure and the labour and transport costs.
The developed economies are retreating from mining, processing and refining stages of production due to high labour costs, while the developing countries with large labour force and striving for higher standard of living are becoming more important. Several countries of Africa and few of south America and Asia have over fifty per cent of the earnings from minerals alone. 2+3=5

25. Employment opportunities, Better Standard of Living, Increased Purchasing Power
1. Job creation and increased employment: Small-scale industries are labour-intensive, creating numerous jobs and providing employment opportunities to a larger portion of the population.
2. Reduced poverty and improved livelihoods: By offering more employment options, small- scale industries help reduce poverty and raise the living standards of individuals in both urban and rural areas.
3. Equitable income distribution and improved local purchasing power: Small-scale industries support a more balanced income distribution, raising the local purchasing power of the individuals, and encouraging economic growth at the grassroots level.

4. Regional development: Small-scale manufacturing often utilizes local raw materials and resources, promoting the economic development of resource-rich regions.
5. Skill development: Small-scale industries provide opportunities for the workforce to develop valuable skills, enhancing their productivity and earning possibilities.
High-tech industries which are regionally concentrated, self- sustained and highly specialised are called technopolies. They are characterised by the use of robotics on the assembly line, computer-aided design (CAD) and manufacturing, electronic controls of smelting and refining processes.
Neatly spaced, low, modern, dispersed, office-plant-lab buildings rather than massive assembly structures, factories and storage areas mark the high-tech industrial landscape. Planned business parks for high-tech start-ups have become part of regional and local development schemes.
New chemical and pharmaceutical products are notable examples of a high-tech industry.
The Silicon Valley near San Francisco and Manufacturing contributes significantly to Silicon Forest near Seattle are examples of the world economy. Iron and steel, textiles, technopolies. 3+2=5

OR

Some of the factors influencing industrial locations are:
1.Access to Market:The existence of a market for manufactured goods is the most important factor in the location of industries.Remote areas inhabited by a few people offer small markets. The developed regions of Europe, North America, Japan and Australia provide large global markets as the purchasing power of the people is very high. The densely populated regions of South and South-east Asia also provide large markets. Some industries, such as aircraft manufacturing, have a global market. The arms industry also has global markets.
2. Access to Raw Material: Raw material used by industries should be cheap and easy to transport. Industries based on cheap, bulky and weight-losing material (ores) are located close to the sources of raw material such as steel, sugar, and cement industries. Perishability is a vital factor for the industry to be located closer to the source of the raw material. Agro-processing and dairy products are processed close to the sources of farm produce or milk supply respectively.
3. Access to Labour Supply : Labour supply is an important factor in the location of industries. Some types of manufacturing still require skilled labour. Increasing mechanisation, automation and flexibility of industrial processes have reduced the dependence of industry upon the labours.
4. Access to Sources of Energy: Industries which use more power are located close to the source of the energy supply such as the aluminium industry. Earlier coal was the main source of energy, today hydroelectricity and petroleum are also important sources of energy for many industries.
5. Access to Transportation and Communication Facilities : Speedy and efficient transport facilities to carry raw materials to the factory and to move finished goods to the market are essential for the development of industries. The cost of transport plays an important role in the location of industrial units. Western Europe and eastern North America have a highly developed transport system which has always induced the concentration of industries in these areas. Communication is also an important need for industries for the exchange and management of information.
6. Government Policy: Governments adopt 'regional policies' to promote 'balanced' economic development and hence set up industries in particular areas. 5
26. Urban centres in India are more differentiated in terms of the socio- economic, politico-cultural and other indicators of development. On one hand there are bunglows, high-rise apartments etc. and on the other, there are slums, jhuggi-jhopari clusters and colonies of shanty structures.
i.Slums are inhabited by those people who were forced to migrate from the rural areas to these urban centres in search of livelihood but could not afford proper housing due to high rent and high costs of land.
ii.They occupy environmentally incompatible and degraded areas. Slums are residential areas of the least choice, dilapidated houses, poor hygienic conditions, poor ventilation, lack of basic amenities, like drinking water, light and toilet facilities, etc.
iii.Open defecation, unregulated drainage system and overcrowded narrow street patterns are serious health and socio environmental hazards.
Most of the slum population works in low-paid, high risk-prone, unorganised sectors of the urban economy. These conditions make their lives harder.

i. Consequently, they are the undernourished, prone to different types of diseases and illness and cannot afford to give proper education to their children.
ii. The poverty makes them vulnerable to drug abuse, alcoholism, crime, vandalism, escapism, apathy and ultimately social exclusion.

OR

1.Noise pollution refers to the state of unbearable and uncomfortable to human beings which is caused by noise from different sources. It is hazardous in many metropolitan and big cities in India.

2. Its intensity declines with increase in distance from the source of pollution like in sea traffic; the noise pollution is confined to the harbour due to loading and unloading activities being carried.
3. This matter has become a serious concern only in recent years due to a variety of technological innovations.
4. The main sources of noise pollution are various factories, mechanised construction and demolition works, automobiles and aircraft, etc.
5. Industries cause noise pollution but with varying intensity depending upon the type of industry.
6. The biggest nuisance is the noise produced by traffic.
7. As its intensity and nature depend upon factors such as the type of aircraft, vehicle, train and the condition of road, as well as, that of vehicle.
8. There may be added periodical but polluting noise from sirens, loudspeakers used in various festivals, programmes associated with community activities. 5
(Any five or any other relevant points)

27.i.The composition of commodities in India's international trade has been undergoing a change over the years. In export the share of agriculture and allied products and manufactured goods have decreased.
ii. Share from crude petroleum and products and other commodities have increased.
iii. The share of ore and minerals have largely remained constant over the years from 2015-16 to 2021-22.
iv. The decline in traditional items is largely due to the tough international competition.
v. Amongst the agriculture products, there is a decline in the export of traditional item, such as cashew, etc., though an increase has been registered in floricultural products, fresh fruits, marine products and sugar, etc. 5

28.Bharmaur tribal region has harsh climate conditions, low resource base and fragile environment. These factors have influenced the society and economy of the region. It is one of the most (economically and socially) backward areas of Himachal Pradesh. The Gaddis have experienced geographical and political isolation and socio-economic deprivation.
To improve the quality of life of the Gaddi tribe and bridge the development gap between Bharmaur and other areas of Himachal Pradesh
Focus areas
i. Agriculture and Allied Activities: Modernization of Agriculture Promote Horticulture and livestock Improvement, adapt agricultural practices and infrastructure development, considering factors like to the region's harsh climate, snowfall and limited growing seasons.
ii. Education and Skill Development: Access to Quality Education Vocational Training, Adult Literacy Programs, Address issues of poverty, unemployment, and historical isolation through targeted programs and skill development.
iii. Livelihood Opportunities: Promote eco-friendly tourism, Support Handicrafts, Improve Connectivity.
iv. Community Participation: Ensure active involvement of the Gaddi community in planning and implementation to address their specific needs and priorities.
v. Government Support: Secure funding and policy support from the government for infrastructure development, education, and skill-building programs.
Elaborate the above points 5

OR

Measures proposed to promote sustainable development in the Indira Gandhi Canal Project are meant to restore ecological balance.
i.The first requirement is strict implementation of water management policy. The canal project envisages protective irrigation in Stage-I and extensive irrigation of crops and pasture development in Stage-II.
ii.In general, the cropping pattern shall not include water intensive crops. It shall be adhered to and people shall be encouraged to grow plantation crops such as citrus fruits.
iii.The CAD programmes such as lining of water courses, land development and levelling and warabandi system (equal distribution of canal water in the command area of outlet) shall be effectively implemented to reduce the conveyance loss of water.
iv.The areas affected by water logging and soil salinity shall be reclaimed.
v.The eco-development through afforestation, shelterbelt plantation and pasture development is necessary particularly in the fragile environment of Stage-II.
vi.The social sustainability in the region can be achieved only if the land allottees having poor economic background are provided adequate financial and institutional support for cultivation of land.
vii.The economic sustainability in the region cannot be attained only through development of agriculture and animal husbandry. The agricultural and allied activities have to develop alongwith other sectors of economy. This shall lead to diversification of economic base and establishment of functional linkages between basic villages, agro-service centres and market centres. 5
(Any five or any other relevant points)

29.A -Hamburg
B- Capetown
C -Panama Canal
D- Amazon Basin
E -Santiago
F -Vladivostok
G- Downs
For Visually impaired students.
A -Hamburg/London/North Cape
B -Capetown
C -Rhine waterway
D -Amazon Basin
E- Santiago/ Buenos Airies
F- Vladivostok/ St. Petersburg
G- Downs
30. A.Mayurbhanj
B.Tuticorin
C.Jamnagar
D.Bihar
E.Assam
F.Bengaluru
G.Raniganj
For Visually impaired students.
A.Mayurbhanj
B.Tuticorin
C.Jamnagar
D.Bihar
E.Gujarat
F.Bengaluru
G.Raniganj

**SAMPLE QUESTION PAPER-1**
**(GEOGRAPHY THEORY (029)**

**Section A**

**Questions no. 1 to 17 are Multiple Choice type questions. (17 x 1)**

1. Question: Read the following statements regarding the stages of demographic transition in India and choose the correct option:

I. Phase I (1901–1921) is referred to as the stagnant phase because both birth and death rates were very high, resulting in a low rate of growth.

II. Phase II (1921–1951) is known as the period of steady population growth due to improvements in health and sanitation that began to lower the mortality rate.

III. Phase III (1951–1981) is identified as the period of population explosion in India, characterized by a rapid fall in the mortality rate while fertility remained high.

IV. In the final stage of demographic transition, the population remains almost stagnant because fertility and mortality rates both become very high..

Options:

A. Only I, II, and IV are correct.
C. Only II, III, and IV are correct.
B. Only I, II, and III are correct.
D. Only I, III, and IV are correct.

2. Most of world great ports are classified as

A. Naval Port
C. Oil Port
B. Comprehensive Port
D. Industrial Port

3. Read the following statements regarding 'Medical Tourism' and choose the correct option:

I. Medical tourism occurs when medical treatment is combined with international tourist activities

II. Health services are categorized as tertiary activities because they require specialized professional skills, theoretical knowledge, and practical training.

III. Medical outsourcing is a related trend where medical activities, such as reading radiology images or interpreting MRI scans, are performed across borders.

IV. A major factor for the growth of this sector in countries like India is the availability of cheap and skilled professionals compared to developed nations.

Options:

A. Only I and II are correct.
C. Only II, III, and IV are correct.
B. Only I, II, and III are correct.
D. All the statements are correct.

4. Read the following statements regarding the measurement of human development and choose the correct option:

I. The Human Development Index (HDI) measures the attainments or achievements of a country in key areas of human development.

II. The Human Poverty Index (HPI) is used to measure the shortfalls or deprivations in human development rather than achievements.

III. Both the HDI and HPI are non-income measures that provide a more comprehensive view of a country's development than looking at income alone.

Options:

A. Only I and II are correct.
C. Only II and III are correct.
B. Only I and III are correct.
D. All the statements are correct.

5. Which one of the following pair is not correctly matched?

List1 List 2

A. Equity I. To provide equal access to the personality for each person
B. Productivity II. Using natural resources keeping the future in the mine
C. Empowerment III. Empowerment of social and economically backward groups
D. Sustainability IV. Continuity in the availability of a person

6. Match Column I (Mining Centre) with Column II (Mineral)

| **Column I (Mining Centre)** | **Column II (Mineral)** |
|---|---|
| (a) Jharia | (i) Manganese |
| (b) Balaghat | (ii) Bauxite |
| (c) Khetri | (iii) Coal |
| (d) Katni | (iv) Copper |

Options:

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

7. Consider the following statement-
I. Nagpur plan is related to the road development plan
II. NHAI is an autonomous body under the ministry of surface transport.
III. National Highway constitutes about 02 % of road length but carry 80 % of road traffic.
Options:
A. Only I
B. Only I & II
C. Only II & III
D. Only III

8. Arrange the following facts related to the history of international trade in sequence.
i. The Silk Route is an early example of long distance trade connecting Rome to China along the 6,000 km route.
ii. After the disintegration of the Roman Empire, European commerce grew during twelfth and thirteenth century with the development of ocean going warships trade between Europe and Asia grew and the Americas were discovered.
iii. Fifteenth century onwards, the European colonialism began and along with trade of exotic commodities, a new form of trade emerged which was called slave trade.
iv. During the World Wars I and II, countries imposed trade taxes and quantitative restrictions for the first time.
Codes-
A. i, ii, iv, v
B. iv, ii, iii, I
C. i, ii, iii, iv
D. iii, ii, iv, i

9. Consider these two statements and draw an appropriate conclusion.
1. Water resources are gradually declining.
2. Water pollution is caused by concentration of fluoride and nitrite.
Options-
A. Both statement 1 and 2 are correct and 1 is the correct explanation of statement 2.
B. Both statement 1 and 2 are correct and 1 is not correct explanation of statement 2.
C. Statement 1 is correct and statement 2 is incorrect.
D. Statement 2 is correct and statement 1 is incorrect.

10. Rajasthan which was earlier a sparsely populated state now has higher concentration of population because of:
A. Expansion of transport network
B. Availability of energy resources
C. Development of historical places
D. Development of Agriculture

11. Which one of the following is NOT an objective of the 'Namami Gange Programme'?

A. Developing sewerage treatment systems in towns
B. Monitoring of industrial effluents
C. Afforestation along the banks of the river
D. To divert the flow of the river from the cities

12. Raman is a small farmer. Which of the following is applicable to him?

1. Uses modern inputs and practises a highly mechanised form of farming.
2. Gets huge capital by selling surplus crop in the market.
3. Hires farm labourers to work on his fields.
4. Produces mainly for subsistence.

Options-

A. Only 1 & 2 B. 1, 2, 3 & 4 C. Only 1,2 & 3 D. Only 4

13. There are two statements given below, marked as Assertion (A) and Reason (R). Read the statements and choose the correct option.

**Assertion (A):** India's Green Revolution is an example of how the productivity of scarce land resources can be increased with improved production technology.

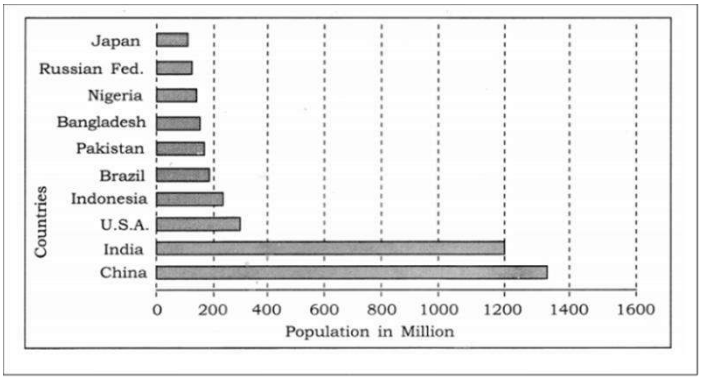
**Reason (R):** Because of the Green Revolution, farmers produced far larger quantities of food grains than was possible earlier, on the same piece of land.

A. A is true but R is false.
B. A is false but R is true.
C. Both A and R are true and R explains A.
D. Both A and R are true but R does not explain A

14. Setubharatam Pariyojana launched by the Indian government aims to achieve?

A. Development of State roads along coastal border areas.
B. The construction of about 1500 major bridges and 200 rail over bridges and rail under bridges.
C. Development of border roads.
D. Construction of more water ways.

Read the following graph and answer the following.




15. Identify the highest populous country.

A. Russia B. India C. China D. Canada

16. Identify the Asian country which is 4th largest in the world in terms of population.

A. Pakistan
B. India
C. China

D. Indonesia

17. Which continent has the largest concentration of the world most populated countries?
A. North America
B. South America
C. Africa
D. Asia

**Section-B**

**18. Study the following table and answer the following questions:**

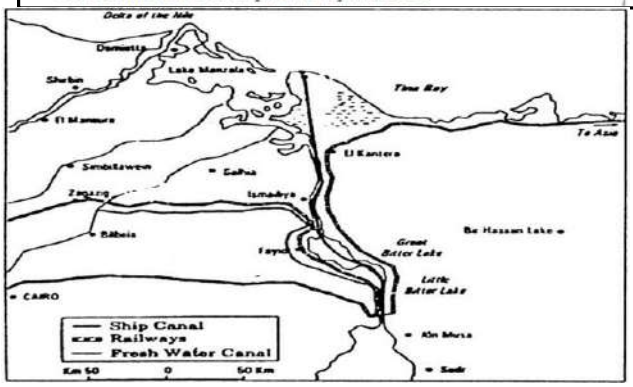
*Table 4.2: Human Development: Categories, Criteria and Countries*

| Level of Human Development | Score in Development Index | Number of Countries |
|---|---|---|
| Very High | above 0.800 | 66 |
| High | between 0.700 up to 0.799 | 53 |
| Medium | between 0.550 up to 0.699 | 37 |
| Low | below 0.549 | 33 |

*Source: Human Development Report, 2020*

18.1. Identify the human development score for the countries classified as having low human development.
18.2. Give reasons for low level of human development in 33 countries.
18.3. List the criteria used for the calculation of Human development level.

**19. Study the map of Suez Canal and answer the following questions:**




19.1. Name the two seas connected by the Suez Canal.
19.2. Why do we consider this as Europe's gateway to the Indian Ocean?
19.3. Write one characteristic of the Suez Canal.

**Section-C**

20. Most of the town of India performs a number of functions. Justify this statement by giving three arguments with suitable example.
21. Different modes of transport are used in different parts of the world. Support the statement by giving at least three suitable examples.
22. North Indian plains, deltas and coastal plains have higher concentration of population than the interior districts of Southern and Central Indian state. Why? Support your answer with at least 3 suitable reasons.
23. Physical environment has been greatly modified by human beings it has also intern impacted on human life explain the statement in your words.

**Section-D**

24. Suppose, you are Sameer Sen. Sameer Sen wants to establish a factory in Thailand. Give a brief description of factors that help to keep in mind while deciding the location of the factory.
25. Consider a situation in which you are the part of rural communities and you inspire your community members to do away the subsistence farming and to opt commercial farming. Write down the challenges and benefits that your community come across in brief.
26. Indira Gandhi canal project was questionable due to its impact of physical environment. In view the above problem what are the measures taken to promote for sustainability in the Indira Gandhi canal command area. Explain in details.

27. “Despite the setback caused by the partition, Indian ports, continued to grow after Independence.” Support the statement.

28. Though water pollutants are also created from natural sources but the pollutants from human sources are the real cause of concern. Explain.

## Section-E

**29. In the given political outline map of the world the following four feature are shown Identify ANY 05 features and write their correct names on the outline marked against each feature.**

(A) Terminal station of trans-Siberian railway

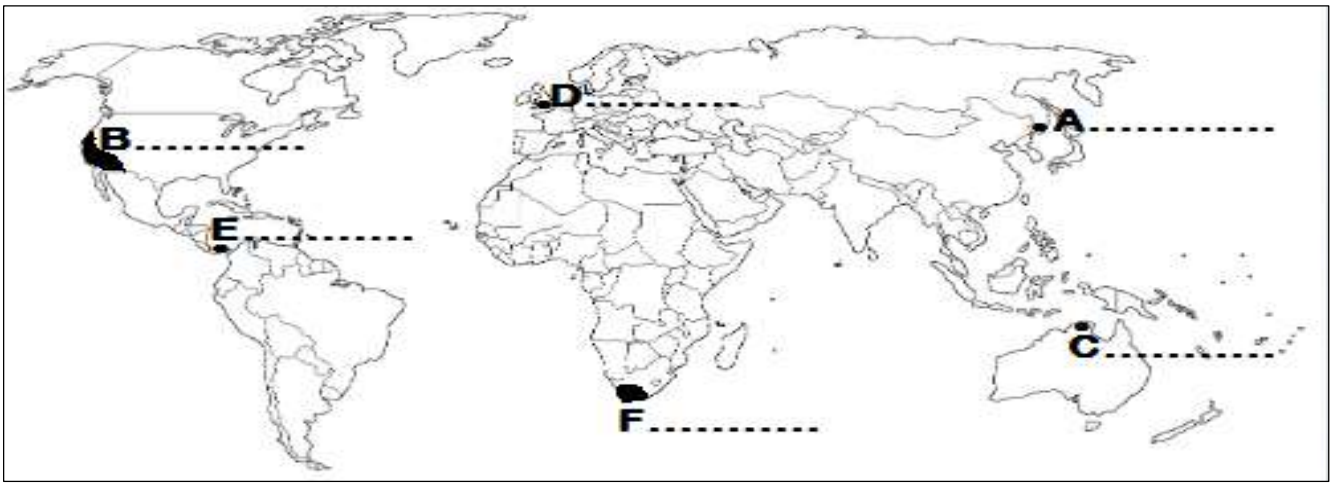
(B) An area of commercial livestock rearing

(C) An International airport

(D) An International Sea Port

(E) A canal that connect two oceans

(F) An area of Extensive Commercial Grain Farming.




**30. In the given political outline map of India locate and label the any 05 of the following with appropriate symbols:**

(A) A state with highest population density

(B) A leading producer of sugarcane

(C) A major Sea Port which was developed to compensate the lack of Karachi Sea Port

(D) AN IRON ORE MINE OF Orissa.

(E) An international airport situated in far south of the country

(F) A Market based oil refinery in U. P.

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**SAMPLE QUESTION PAPER – 2**
**Class: XII (2026-27)**

Time allowed: 3 Hours Maximum marks: 70

**Section A**

Questions no. 1 to 17 are Multiple Choice Type Questions. (17X1) 17

1 The Human Poverty Index measures the shortfall in human development on the basis of which parameter/s?

A. The adult literacy rate and the life expectancy at birth.
B. Access to resources in terms of purchasing power.
C. The number of small children who are underweight.
D. The number of children enrolled in the school .

2 There are two statements marked as Assertion (A) and Reason (R). Mark your answer as per the codes provided below.

**Assertion (A):** Often smaller countries have done better than larger ones and relatively poorer nations have been ranked higher than richer neighbours in terms of human development.

**Reason (R):** Size of the territory and per capita income are not directly related to human development. Countries with higher human development are those where a lot of investment in the social sector has taken place.

Options:

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. Both (A) and (R) are incorrect.
D. (A) is correct but (R) is incorrect.

3 Which of the following statements are correct related to rural marketing centres? Choose the correct option.

i. Rural marketing centres cater to nearby settlements.
ii. Rural Marketing centres are quasi-urban trading centres of the most rudimentary type.
iii. They offer manufactured goods as well as many specialized markets develop, e.g. markets for labour, housing, semi or finished products.
iv. Personal and professional services are not well-developed. These form local collecting and distributing centres.

Options:

A. i, ii, iv
B. i, iii, iv
C. ii, iii, iv
D. i, ii, iii

4 Arrange the following facts related to the history of international trade in sequence.

i. The Silk Route is an early example of long distance trade connecting Rome to China – along the 6,000 km route.
ii. After the disintegration of the Roman Empire, European commerce grew during twelfth and thirteenth century with the development of ocean going warships trade between Europe and Asia grew and the Americas were discovered.
iii. Fifteenth century onwards, the European colonialism began and along with trade of exotic commodities, a new form of trade emerged which was called slave trade.
iv. During the World Wars I and II, countries imposed trade taxes and quantitative restrictions for the first time.

Codes

A. i, ii, iv, v
B. iv, ii, iii, i
C. i, ii, iii, iv
D. iii, ii, iv, i

5 The act of opening up economies for trading by bringing down trade barriers like tariffs and allowing goods and services from everywhere to compete with domestic products and services is called .

A. Dumping
B. Trade liberalization

C. Balance of trade
D. Bilateral trade

6 Arrange the following states in order of their population from highest to lowest.
1. Bihar
2. Maharashtra
3. Uttar Pradesh
4. West Bengal

Codes:
A. 1, 3, 2, 4
B. 4, 3, 2, 1
C. 3, 2, 1, 4
D. 2, 1, 4, 3

7 There are four distinct phases of population growth identified in India over the last one century. Identify the phase from the given description.
This period is referred to as the period of population explosion in India, which was caused by a rapid fall in the mortality rate but a high fertility rate of population in the country. The average annual growth rate was as high as 2.2 per cent. It is in this period that developmental activities were introduced through a centralized planning process and economy started showing up ensuring the improvement of living condition of people at large. Consequently, there was a high natural increase and higher growth rate.
A. Phase I 1901-1921
B. Phase II 1921-1951
C. Phase III 1951-1981
D. Phase IV post 1981 till present

8 The objective of protective irrigation is to :
A. protect the crops from adverse effects of soil moisture deficiency.
B. provide sufficient soil moisture in the cropping season to achieve high productivity.
C. double water input per unit area of cultivated land so that multiple cropping can be done.
D. increase the productivity of soil.

9 There are two statements marked as Assertion (A) and Reason(R). Mark your answer as per the codes provided below.
**Assertion (A):** There has been a significant increase in agricultural output and yield, of many crops such as rice and wheat among the other crops like sugarcane, oilseeds and cotton, due to improvement in technology during the last 50 years.
**Reason (R):** Expansion of irrigation has played a crucial role in enhancing agricultural output in the country. It provided basis for introduction of modern agricultural technology during the last 50 years.
Options:
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. Both (A) and (R) are incorrect.
D. (A) is correct but (R) is incorrect.

10 Identify the statement that is NOT true with regard to watershed management?
I. It refers to efficient management and conservation of surface and groundwater resources.
II. Watershed management includes judicious use of all resources – Both natural and human with in a watershed.
III. Watershed management aims at bringing about balance between natural resources on the one hand and society on the other.
IV. The success of watershed development solely depends upon the state government.
Options:
A. Statement I and IV
B. Only II
C. Only III
D. Statement IV

11 A group of students were conducting research on water Pollution level in Delhi. Which organization will students need to visit to gather information on water quality?
A. Delhi Pollution Control Committee (DPCC)

B. Indian Council of Environmental Research (ICER)
C. National water development Agency (NWDA)
D. Central Pollution Control Board (CPCB)

12 Which one of the following is incorrectly matched?

| | List I (Name of the state) | List II (Coal mining Centre) |
|---|---|---|
| A. | West Bengal | I. Raniganj |
| B. | Tamil Nadu | 2. Neyveli |
| C. | Maharashtra | 3. Korba |
| D. | Odisha | 4. Talcher |

13 Satellite is mode of communication in themselves as well as they regulate the use of other means of communication. Choose the correct satellite system used by India.

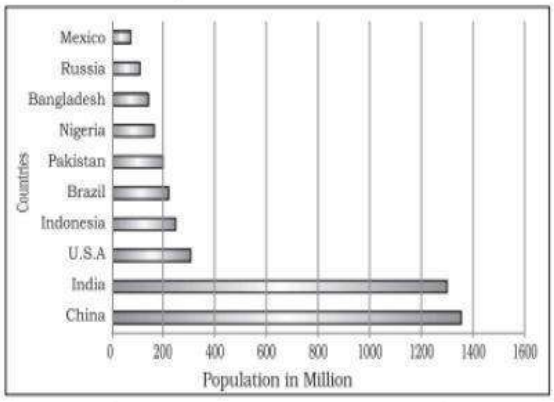
1. India Remote Sensing Satellite System (IRS)
2. Indian Space Research Organization (ISRO)
3. Indian Nation Satellite System (INSAT)
4. India Regional Navigation Satellite System

Codes

A. Both I and III
B. Only I
C. Both II and III
D. Only IV

14 Setubharatam Pariyojana launched by the Indian government aims to achieve?
A. Development of State roads along coastal border areas.
B. The construction of about 1500 major bridges and 200 rail over bridges and rail under bridges.
C. Development of border roads.
D. Construction of more water ways.

**Read the graph and answer the following questions no.15-17:**




15 Identify the highest populous country?
A. Russia B. India C. Canada D. China

16 Identify the African country that has very high population.
A. Mexico B. Brazil C. Pakistan D. Nigeria

17 Which continent has the highest number of the world's most populous countries?
A. Africa
B. North America
C. Asia
D. South America

## Section B

Questions number 18 and 19 are Source-based Questions. 2x3=6

18 Read the passage carefully and answer the questions that follows:

**Tourism**

Tourism has become the world's single largest tertiary activity in total registered jobs (250 million) and total revenue (40 per cent of the total GDP). Besides, many local persons, are employed to provide services like accommodation, meals, transport, entertainment and special shops serving the tourists. Tourism fosters the growth of infrastructure industries, retail trading, and craft industries (souvenirs). In some regions, tourism is seasonal because the vacation period is dependent on favourable weather conditions, but many regions attract visitors all the year round.

The warmer places around the Mediterranean Coast and the West Coast of India are some of the popular tourist destinations in the world. Others include winter sports regions, found mainly in mountainous areas, and various scenic landscapes and national parks, which are scattered. Historic towns also attract tourists, because of the monument, heritage sites and cultural activities.

(I) What constitutes tourism?

(II) List two renowned global tourist destinations.

(III) "Tourism has become the largest tertiary activity in the world". Comment. 3 x1=3

19 Study the following table and answer the questions: 3 x1=3

| *Level of Human Development* | *Score in Development Index* | *Number of Countries* |
|---|---|---|
| Very High | above 0.800 | 66 |
| High | between 0.700 up to 0.799 | 53 |
| Medium | between 0.550 up to 0.699 | 37 |
| Low | below 0.549 | 33 |

*Source: Human Development Report, 2020*

(I) Identify the human development score for the countries classified as having Medium Human Development?

(II) What can you infer about the well-being of people living in countries with a high level of human development?

(III) Give reasons for low level of human development in 33 countries.

## Section C

Questions numbers 20 to 23 are Short Answer Type Questions 4x3=12

20 Explain humanisation of nature with the help of a real life example.

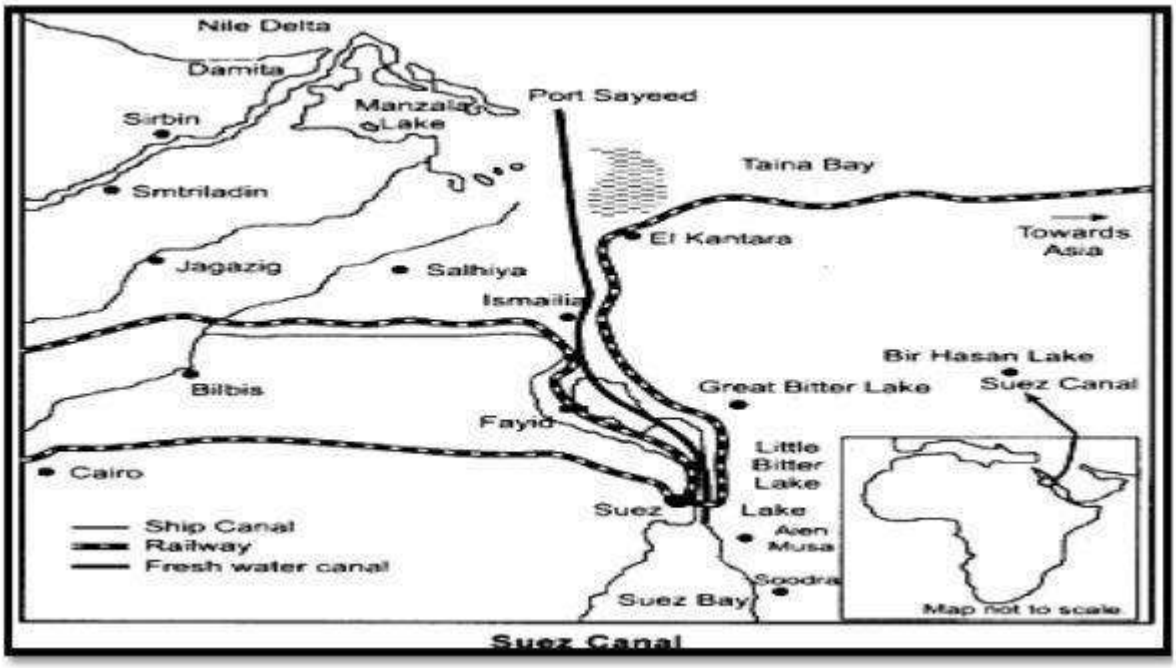
OR

"The concept of Neo- determinism is compared with traffic lights on the cross road". Analyze the statement with examples. 3

21 Prepare a proposal for a smart city that integrates advanced technology to enhance urban living while prioritising sustainability, cleanliness and affordability. 3

22 Enumerate the challenges confronting society regarding the adolescent population. Enlist a few measures to overcome these problems. 2+1=3

23 Study the map of Suez Canal and answer the following questions:




(I) Name the two seas connected by the Suez Canal.
(II) Why do we consider this as Europe's gateway to the Indian Ocean?
(III) Write one characteristic of the Suez Canal. 1+1+1=3

## Section D

Questions number 24 to 28 are Long Answer Type Questions- 5X5=25

24 How does food gathering as an economic activity differ between primitive and modern societies, and why is it unlikely to significantly influence the global economy today? 3+2=5

25 A. Assess the factors that contributed to the development of large-scale industries all over the world.

OR

B. Access to transportation and communication facilities are essential for the development of industries.' Justify the statement with suitable example. 5

26 A. Evaluate the benefits derived from Integrated Tribal development Project implemented in Bharmaur Region.

OR

B. 'Hill Area Development Programmes were initiated for the specified areas keeping in view their topographical, ecological, social and economic conditions'. Justify the statement. 5

27 A. The composition of commodities in India's international trade has been undergoing a change over the years. Substantiate the statement with suitable arguments.

OR

B. 'Air transport plays an important role in the international trade'. Justify the statement with suitable arguments. 5

28 A. 'Environmental pollution by solid wastes has now got significance due to enormous growth in the quantity of waste'".

OR

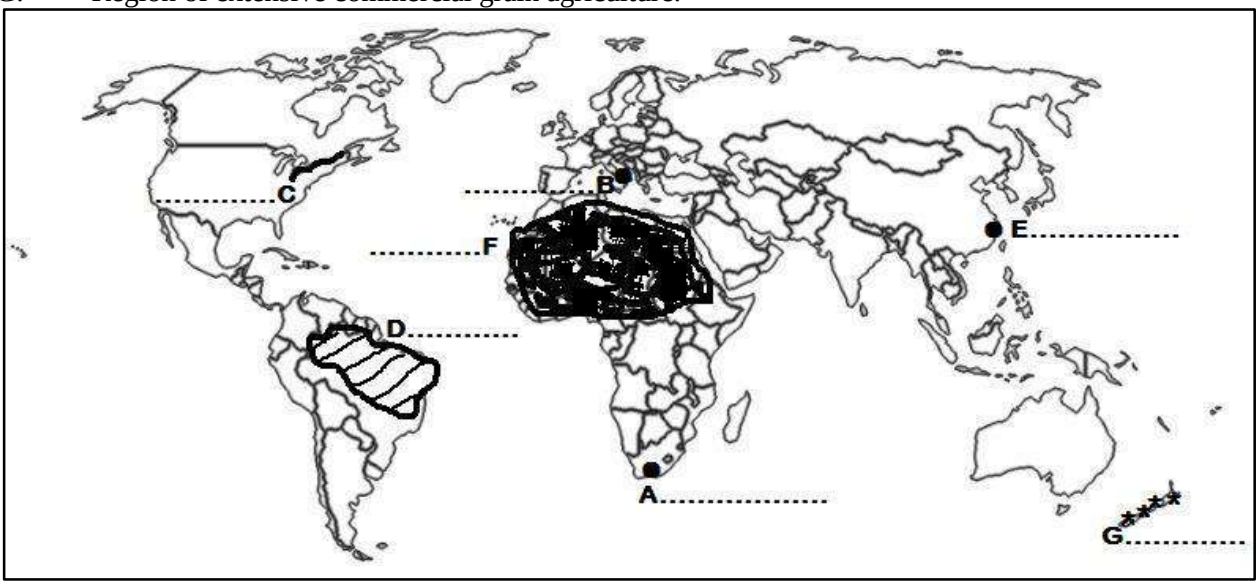
B. Give reasons for the unsustainable increase in solid waste and discuss two strategies to control waste generation at the source in urban areas. 5

## Section E

Question numbers 29 & 30 are Map based questions having 5 sub-parts each. 2X5=10

29 On the given political map of the World, seven geographical features have been marked as A, B, C, D, E, F and G. Identify any five with the help of the following information and write their correct names on the lines drawn near each feature.

A. A major seaport.
B. An international airport.
C. An important Seaway.
D. An area of subsistence gathering in South America.
E. An important seaport of Asia.
F. An area of Nomadic Herding.
G. Region of extensive commercial grain agriculture.




30 Locate and label any five of the following geographical features on the Political Outline map of India with appropriate symbols:

A. An important coal mine in Orisha.
B. An important seaport in Karnataka.
C. Jharia – Coal mines.
D. An oil refinery in Uttar Pradesh.
E. The state with lowest population density.
F. The state leading in the production of Tea.
G. An international airport in Punjab.

**SAMPLE QUESTION PAPER-3**
**(GEOGRAPHY THEORY (029)**

## Section A

**Questions no. 1 to 17 are Multiple Choice type questions. (17 x 1)**

1. International Labour Organisation initiated which one of the following approaches of Human Development ?

A. Income
B. Welfare
C. Capability
D. Basic Needs

2. There are two statements marked as Assertion (A) and Reason (R). Mark your answer as per the codes provided below.

Assertion (A): Very often, people do not have the capability and freedom to make even basic choices.

Reason (R): This may be due to their inability to acquire knowledge, their material poverty, social discrimination, inefficiency of institutions.

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. Both (A) and (R) are incorrect.
D. (A) is correct but (R) is incorrect.

3. Read the following characteristics of workforce carefully, where works is performed through outsourcing and choose the correct option.

I. Availability of cheap and skilled workers
II. Good English language skill of involved workforce
III. Highly-skilled well-paid professionals
IV. Facility of customer support and call centre services

Options :

A. Only I, II and III are correct.
B. Only I, II and IV are correct.
C. Only I, III and IV are correct.
D. Only II, III and IV are correct.

4. Which one of the following statements are true?

1. To liberalise the world from high tariffs and various other types of restrictions, GATT was formed in1948.
2. The GATT was transformed into the World Trade Organisation from 1st July 1995.
3. The WTO is the only international organisation dealing with the global rules of trade between nations.
4. WTO resolves disputes between its member nations

Options:

A. 1,2,3 & 4
B. 1,3 & 4
C. 1,2 & 4
D. 2,3 & 4

5. Assertion (A) : Countries need to be cautious about dumped goods under free trade.
Reason (R) : Dumping of goods can harm the domestic producers.

Options :

A. (A) is true, but (R) is false.
B. (A) is false, but (R) is true.
C. Both (A) and (R) are true, but (R) is not the correct explanation of (A).
D. Both (A) and (R) are true and (R) is the correct explanation of (A).

6. Which one of the following is not a challenge of adolescent population faced by the society ?

A. High marriage age
B. Drug abuse and alcoholism
C. Low female literacy
D. Dropouts from school

7. According to standard census definition, who is a marginal worker?

A. Who works for at least 183 days in a year.
B. Who works for less than 183 days in a year.
C. Who works for at least 200 days in a year.
D. None of the above

8. Read the following statements carefully:
**Statement I:** The National Mission for Sustainable Agriculture (NMSA) aims to make agriculture more productive, sustainable, remunerative, and climate resilient.
**Statement II:** NMSA promotes location-specific integrated farming systems along with soil and moisture conservation measures.
**Statement III:** NMSA discourages organic farming and focuses only on chemical-intensive agriculture.
Choose the correct option:
A. Only Statement I is correct
B. Statement I and II are correct, but III is incorrect
C. Statement II and III are correct
D. All statements are correct

9. There are two statements marked as Assertion (A) and Reason (R). Mark your answer as per the codes provided below.
**Assertion (A):** The contribution of the agricultural activities reduces over time, the pressure on land for agriculture does not decline.
**Reason (R):** In developing countries, the share of population dependent on agriculture usually declines much more slowly compared to the decline in the sector's share in GDP.
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. Both (A) and (R) are incorrect.
D. (A) is correct but (R) is incorrect.

10. Identify the statement that is NOT true with regard to rainwater harvesting?
1. Rainwater harvesting is a method to capture and store rainwater for various uses.
2. It improves the quality of groundwater through dilution of contaminants.
3. Rainwater harvesting is not beneficial for urban areas.
4. In Rajasthan, rainwater harvesting structures are known as Kund or Tanka.
Options:
A. 2 B. 2 & 3 C. 3 D. 4

11. In rural areas of Uttar Pradesh, people are being informed about the 'Haryali' project which is related with……..
A. Recycle and reuse of water
B. Rainwater harvesting
C. Green Revolution
D. Watershed development project

12. Match Column I (Mineral Mine/Centre) with Column II (State) and choose the correct option.

| Column I (Mine/Centre) | Column II (State) |
|---|---|
| (a) Khetri | (i) Tamil Nadu |
| (b) Bailadila | (ii) Jharkhand |
| (c) Neyveli | (iii) Rajasthan |
| (d) Jharia | (iv) Chhattisgarh |

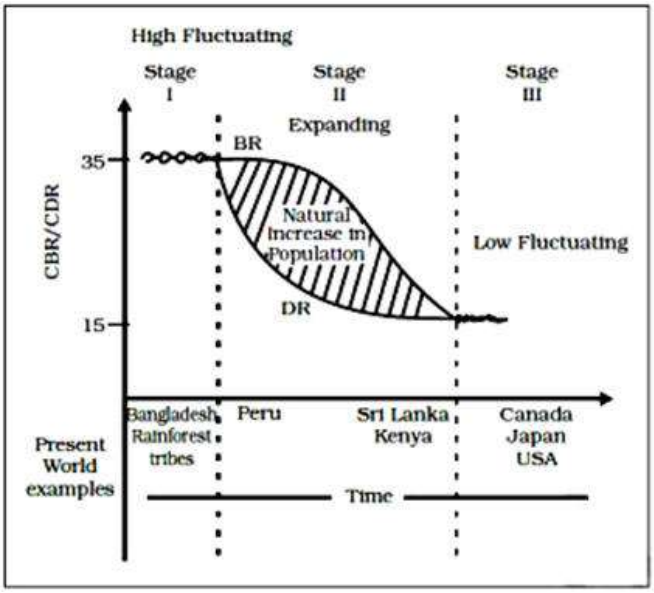
A. (a)-(iii), (b)-(iv), (c)-(i), (d)-(ii)

B. (a)-(ii), (b)-(i), (c)-(iv), (d)-(iii)
C. (a)-(iv), (b)-(ii), (c)-(iii), (d)-(i)
D. (a)-(iii), (b)-(ii), (c)-(i), (d)-(iv)

13. Which of the following statements correctly describes National Waterway–3 (NW–3)?
A. It connects Prayagraj and Haldia through the Ganga River.
B. It includes the West Coast Canal along with Champakara and Udyogmandal canals.
C. It lies on the Brahmaputra River between Sadiya and Dhubri.
D. It includes only the Godavari River stretch.

14. Which statement/s is/are true regarding INSAT?
1. The INSAT is the acronym of Indian National Satellite System.
2. It was established in 1984.
3. It is a multi-purpose satellite system for telecommunication, meteorological observations etc.
Options:
(A) 1,2 & 3 (B) 1 & 2 (C) 1&3 (D) 2&3

**15. Study the given diagram carefully and answer the questions no. 15-17.**




15. Which stage shows the High Fertility and High Mortality Rate?
A. Stage II B. Stage I C. Stage I and II both D. Stage III
16. Which one of the following country has low fertility and low mortality?
A. Sri Lanka B. Peru C. Canada D. Bangladesh
17. What is Natural Increase in Population?
A. Death Rate – Birth Rate B. Death Rate + Birth Rate
C. Birth Rate x Death Rate D. Birth Rate – Death Rate

## Section B

**Questions number 18 and 19 are Source Based Questions**

18. Read the passage carefully and answer the questions that follows: 3x1=3

Trade is essentially buying and selling of items produced elsewhere. All the services in retail and wholesale trading or commerce are specifically intended for profit. The towns and cities where all these works take place are known us trading centres. The rise of trading from barter at the local level to money-exchange of international scale has produced many centres and institutions such as trading centres or collection and distribution points. Trading centres may be divided into rural and urban marketing centres. Rural marketing centres cater to nearby settlements. These are quasi-urban centres. They serve as trading centres of the most rudimentary type. Here personal and professional services are not well-developed. These form local collecting and distributing centres. Most of these have mandis (wholesale markets) and also retailing areas. They are not urban centres per se but are significant centres for making available goods and services which are most frequently demanded by rural folk.

(i) What do you mean by Trading Centre?
(ii) Write the features of rural marketing centres.
(iii) What is Trade?

**19. Read the passage carefully and answer the questions that follows: 3x1=3**

The human development index (HDI) ranks the countries based on their performance in the key areas of health, education and access to resources. These rankings are based on a score between 0 to 1 that a country earns from its record in the key areas of human development. The indicator chosen to assess health is the life expectancy at birth. A higher life expectancy means that people have a greater chance of living longer and healthier lives. The adult literacy rate and the gross enrolment ratio represent access to knowledge. The number of adults who are able to read and write and the number of children enrolled in schools show how easy or difficult it is to access knowledge in a particular country. Access to resources is measured in terms of purchasing power (in U.S. dollars) each of these dimensions is given a weightage of 1/3. The human development index is a sum total of the weights assigned all these dimensions. The closer a score is to one, the greater is the level of human development. Therefore, a score of 0.983 would be considered very high while 0.268 would mean a very low level of human development.

(i) What do you mean by higher life expectancy?
(ii) What is the weightage of each dimension of HDI?
(iii) What is HDI?

## Section C

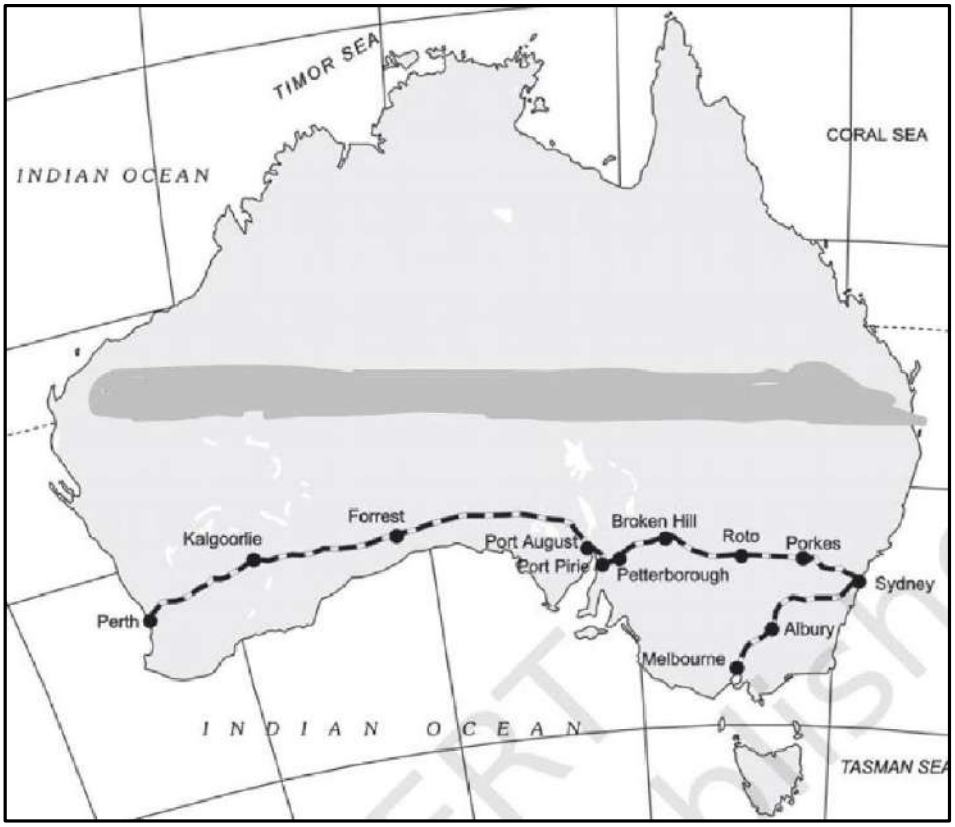
**Questions number 20 to 23 are Short Answer Type Questions. 4x3=12**

20. A. "Neo-determinism attempts to bring a balance between the two concepts of environmental determinism and possibilism." Analyse this statement.

Or

B. "Human beings can conquer nature by obeying it." Analyse this statement in the context of the relationship between humans and nature.

21. Observe the given map and answer the following questions:




a) Identify and name the railway line shown on the map.
b) Name the easternmost and westernmost point of this rail route.
c) Explain how this railway line is helpful for the promotion of trade in this region.

21.1.The following question is for visually Impaired Candidates only in lieu of Q.21.

a) Name the famous Trans-continental railway line of Russia.
b) Name the easternmost and westernmost point of this rail route.
c) Explain how this railway line is helpful for the promotion of trade in this region.

22. Explain the main objectives of the 'Smart Cities Mission' in India.

23. "If development is not engendered, it is endangered." Examine this statement in the context of human development and gender sensitivity.

## Section D

**Questions numbers 24 to 28 are Long Answer Type Questions. 5x5=25**

24. How does Nomadic Herding as an economic activity differ from commercial livestock rearing? Explain.

25. A. What are the factors affecting location of industries? Elaborate each factor with example.

**Or**

B. Write the classification of industries based on Inputs/raw materials. Elaborate each classification.

26. A. Suggest the measures for promotion of sustainability in Indira Gandhi Canal Command Area.

**Or**

B. "Integrated Tribal Development Project laid the highest priority on development of transport and communications, agriculture and allied activities, and social and community services." Examine this statement in the context of the Bharmaur region.

27. A. Write a note on the changing nature of India's international trade.

**Or**

B. How Water transport is important for international trade with context to India? Tell about any five ports of India.

28. A. Discuss the concerns associated with slums in developing countries, such as India, using a suitable example.

**Or**

B. "Urban waste disposal has become a serious problem in India, especially in metropolitan cities." Evaluate the impact of this problem and suggest three measures to overcome it.

## Section E

**Questions number 29 and 30 are Map based questions having 5 sub-parts each.**

29. On the given political map of the World, seven geographical features have been marked as A, B, C, D, E, F and G. Identify any five with the help of the following information and write their correct names on the lines drawn near each feature.

A. The largest shipping canal
B. An International airport
C. An International Sea port
D. An area of extensive commercial grain farming
E. An area of nomadic herding
F. An area of mixed farming
G. An international airport of South America.

**29.1. The following question is for visually Impaired Candidates only in lieu of Q.no. 29.**

**Answer any five questions out of the following:**

A. Name the largest shipping canal of the world.
B. Name an International airport in Yemen.
C. Name an International Sea port in Norway
D. Name an area of extensive commercial grain farming in South Africa.
E. Name an area of nomadic herding.
F. Name an area of mixed farming.
G. Name an international airport of South America.

30. Locate and label any five of the following geographical features on the Political Outline map of India with appropriate symbols:

A. Leading Tea producing state of the country
B. A Manganese mine of Madhya Pradesh
C. A refinery of Gujarat
D. State with lowest population density.
E. A coal mine of Tamil Nadu
F. An international airport of Tamil Nadu
G. Southern most sea port on the east coast of the country.

**30.1. The following question is for visually Impaired Candidates only in lieu of Q.no. 30.**

**Answer any five questions out of the following:**

A. Name a leading Tea producing state of India.
B. Name a Manganese mine of Madhya Pradesh.
C. Name a refinery of Gujarat.
D. Name a state with lowest population density.
E. Name a coal mine of Tamil Nadu.
F. Name an international airport of Tamil Nadu.
G. Name a southernmost sea port on the eastern coast of the country.

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**SAMPLE QUESTION PAPER-4**
**(GEOGRAPHY THEORY (029)**

**Time allowed: 3 Hour** **Maximum marks: 70**

**SECTION A**

1. Study the table and answer - identify the minor religious group concentrated mainly in urban areas of Rajasthan, Gujarat and Maharashtra and choose the correct answer of their population in million

| Religious Group | 2011 | |
|---|---|---|
| | Population (in million) | % of Total |
| Hindus | 966.3 | 79.8 |
| Muslims | 172.2 | 14.2 |
| Christians | 27.8 | 2.3 |
| Sikhs | 20.8 | 1.7 |
| Buddhists | 8.4 | 0.7 |
| Jains | 4.5 | 0.4 |
| Other Religions and Persuasions (ORP) | 7.9 | 0.7 |
| Religion Not Stated | 2.9 | 0.2 |

a) 966.3
b) 27.8
c) 8.4
d) 4.5

**For visually impaired students only**

Which among the following minor religious group has the highest population in India?

a) Budhhist
b) Hindus
c) Jains
d) Muslims

2. Observe the table and answer - Which state has the maximum percentage of the worker in the category of 'other worker'

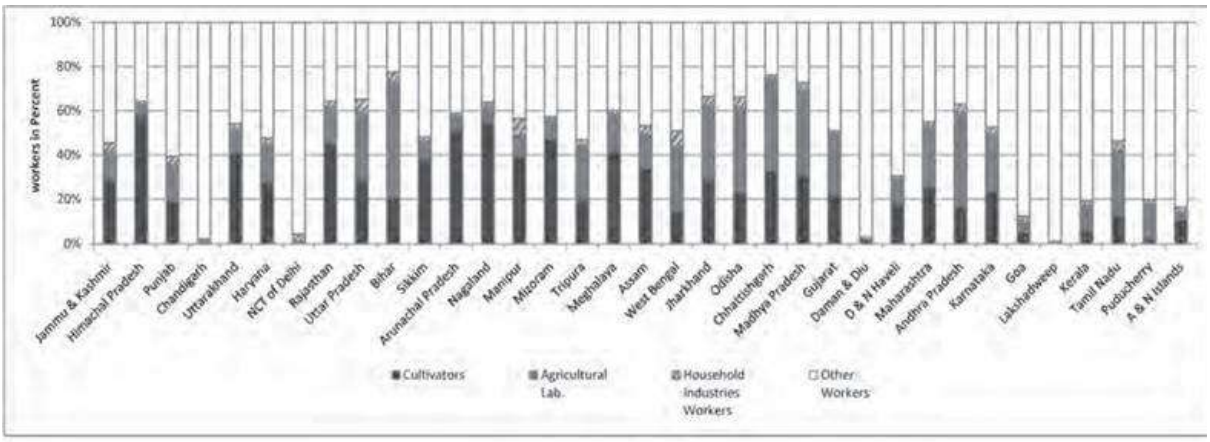



*Fig. 1.4 : India – Occupational Structure, 2011*

a) Kerala
b) Bihar
c) Uttar Pradesh
d) Goa

**For visually impaired students only**

In which of the following India's sector has the lowest percentage worker engaged?

a) Primary
b) Secondary
c) Tertiary
d) None of the above

3. Which among the following is **not true** about spatial variation of work participation rate in different sector.
    a) the proportion of workers in agricultural sector in India has shown a decline over the last few decades (58.2% in 2001 to 54.6% in 2011).
    b) the states like Himachal Pradesh and Nagaland have very large shares of household industries workers.
    c) states like Bihar, Andhra Pradesh, Chhattisgarh, Odisha, Jharkhand, West Bengal and Madhya Pradesh have higher proportion of agricultural labourers.
    d) Delhi, Chandigarh and Puducherry have a very large proportion of workers being engaged in other services.
4. Country X has much population than its resource. For sustainability it should adopt following measure:
    a) Access to family planning services
    b) Free availability of contraceptives
    c) Tax disincentives for large families
    d) All of the above

5. Match the following

| **Level of HD** | **Country** |
|---|---|
| A) Very high | 1) Niger |
| B) High | 2) India |
| C) Medium | 3) Maldives |
| D) Low | 4) Norway |

    a) A-4, B-2, C-3, D-1
    b) A-4, B-3, C-2, D-1
    c) A-4, B-1, C-3, D-2
    d) A-4, B-1, C-2, D-3
6. Identify the type of trading center:

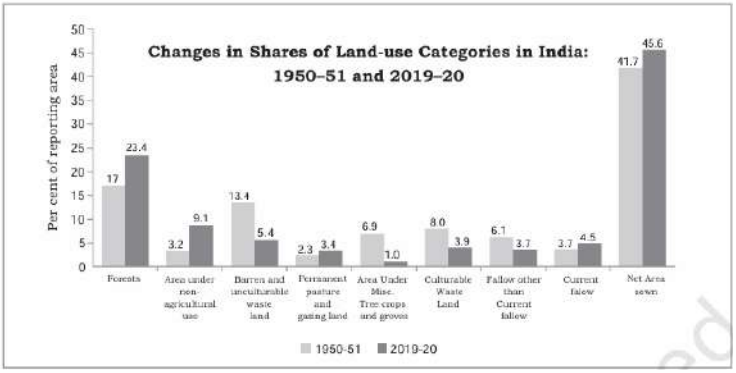
- They serve as trading centres of the most rudimentary type.
- Here personal and professional services are not well-developed.
- These form local collecting and distributing centres
    a) Rural marketing centres
    b) Urban marketing centres
    c) Wholesale trading
    d) Public distribution system
7. Match the following

| Column 1 | Column 2 |
|---|---|
| A) HDI | 1) ILO |
| B) Basic need approach | 2) Amartya Sen |
| C) GNH | 3) UNDP |
| D) Capability Approach | 4) Bhutan Government |

    a) A-1, B-2, C-3, D-4
    b) A-3, B-1, C- 4, D- 2
    c) A-3, B-2, C- 4, D- 1
    d) A-3, B-1, C- 2, D- 3
8. Which among the following is true criticism of WTO:

a) It is argued that free trade makes ordinary people's lives more prosperous.
b) It is actually narrowing the gulf between rich and poor by making rich countries more rich.
c) many developed countries have fully opened their markets to products from developing countries.
d) It is also argued that issues of health, worker's rights, child labour and environment are ignored

9. Which one of the following/s is not true about migration?
   A. Migration may be interpreted as a spontaneous effort to achieve a better balance between population and resources.
   B. Migration may be permanent, temporary or seasonal.
   C. It may take place from rural to rural areas, rural to urban areas, urban to urban areas and urban to rural areas.
   D. People migrate for a better economic and social life.
      a) A and B
      b) B,C and D
      c) Only A
      d) None of the above
10. The practice of selling a commodity in two countries at a price that differs for reasons not related to costs is called ____.
      a) Dumping
      b) Trade deficit
      c) Bilateral trade
      d) Globalisation
11. Study the table and answer which one of the following is/are correct




   1. Share of area under forest, area under non-agricultural uses, current fallow lands and net area sown have shown an increase
   2. The four categories that have registered a decline are barren and wasteland, culturable wasteland, area under tree crops and groves and fallow lands.
   3. As the pressure on land increased, both from the agricultural and non agricultural sectors, the wastelands and culturable wastelands have witnessed decline over time.
   4. The rate of increase is the highest in case of area under non-agricultural uses.
      a) 1, 2 and 3
      b) 2,3 and 4
      c) 1 and 2
      d) All of the above

**For visually impaired students only**

Which one of the following is NOT a land-use category?

a) Fallow land
b) Marginal land
c) Net Area Sown
d) Culturable Wasteland

12. Which among the following is Morden agricultural equipment

    a) Roto till drill
    b) Excavator
    c) Forklift
    d) Dump truck

13. Creation of 'Jal Gram' in water stressed village is proposed activity under

    a) National water policy
    b) Jal Kranti abhiyan
    c) Arvary pani samsad
    d) Neeru meeru

14. **Assertion:** Solar thermal technology has some relative advantages over all other non-renewable energy sources.

    **Reason:** It is cost competitive, environment friendly and easy to construct.

    Options:

    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) Both (A) and (R) are incorrect.
    d) (A) is correct but (R) is incorrect.

15. The Big Inch pipeline transports

    a) Milk
    b) Water
    c) Petroleum
    d) Liquid petroleum gas (LPG)

16. Match the following

| **National water way** | **Stretch** |
|---|---|
| 1) NW-1 | A) Sadiya-Dhubri stretch |
| 2) NW-1 | B) Kottapuram-Kollam stretch |
| 3) NW-1 | C) Specified streches of Godavari and Krishna rivers |
| 4) NW-1 | D) Prayagraj–Haldia stretch |

    a) 1-D. 2-A, 3-C, 4-B
    b) 1-B. 2-A, 3-C, 4-D
    c) 1-A. 2-B, 3-D, 4-C
    d) 1-D. 2-A, 3-B, 4-C

17. Arabica, robusta and liberica are the varieties of

    a) coffee
    b) cotton
    c) rice
    d) jute

**SECTION - B**

18. At present, 55 per cent of the world's population lives in cities and more will join them in near future. This proportion is estimated to go up to 68 per cent by 2050. That will put pressure on governments to make urban areas better places to live with optimum infrastructure facilities for desirable quality of life. Urban population grows as a result of natural increase (when birth rate exceeds death rate), net in

migration (when people move in than out), and sometimes reclassification of urban areas to encompass formerly rural population settlements. In India, it is estimated that after 1961 around 60 per cent of the urban growth has been attributed and about 29 per cent of them from rural areas to urban migration.

18.1 What percentage of the world's population is expected to live in cities by 2050?

18.2 Mention any two causes of urban population growth.

18.3 What challenge will governments face due to increasing urban population?

19. The human poverty index is related to the human development index. This index measures the shortfall in human development. It is a non-income measure. The probability of not surviving till the age of 40, the adult illiteracy rate, the number of people who do not have access to clean water, and the number of small children who are underweight are all taken into account to show the shortfall in human development in any region. Often the human poverty index is more revealing than the human development index.

19.1 What does the Human Poverty Index measure?

19.2 Mention any two indicators used in calculating the Human Poverty Index.

19.3 Why is the Human Poverty Index considered more revealing than the Human Development Index?

**SECTION – C**

20. Discuss the significance and growth of the service sector in modern economic development.
21. Explain the emergence of three new schools of thought of human geography in the 1970s.
22. Explain any three problems commonly found in slum areas.
23. Very hot and dry and very cold and wet regions of India have low density of population. In this light, explain the role of climate on the distribution of population.

Or

Why do some states of India have higher rates of work participation than others?

**SECTION - D**

24. Differentiate between Nomadic Herding and Commercial Livestock Rearing.

**OR**

Discuss the important characteristic features of plantation agriculture. Name a few important plantation crops from different countries

25. Explain the concept of high technology industry. Discuss its significance in the modern economy with suitable examples.

OR

Classify industries based on the source of raw materials with examples.

26. Describe the problems associated with urban waste disposal. What strategies can be adopted for effective waste management.

Or

Explain the causes and consequences of land degradation in India. Suggest measures to control it.

27. Discuss the role of ports in India's economic development. Support your answer with examples of key ports.
28. Discuss the importance of planning in India's development. How does it help in reducing regional disparities?

Or

Describe the challenges faced in maintaining sustainability in the Indira Gandhi canal-irrigated regions. Suggest measures to overcome them.

29. On the given political map of the World, seven geographical features have been marked as A, B, C, D, E, F and G. Identify any five with the help of the following information and write their correct names.

A. Name a major seaport of North America.

B. Name an important seaport located in Japan.

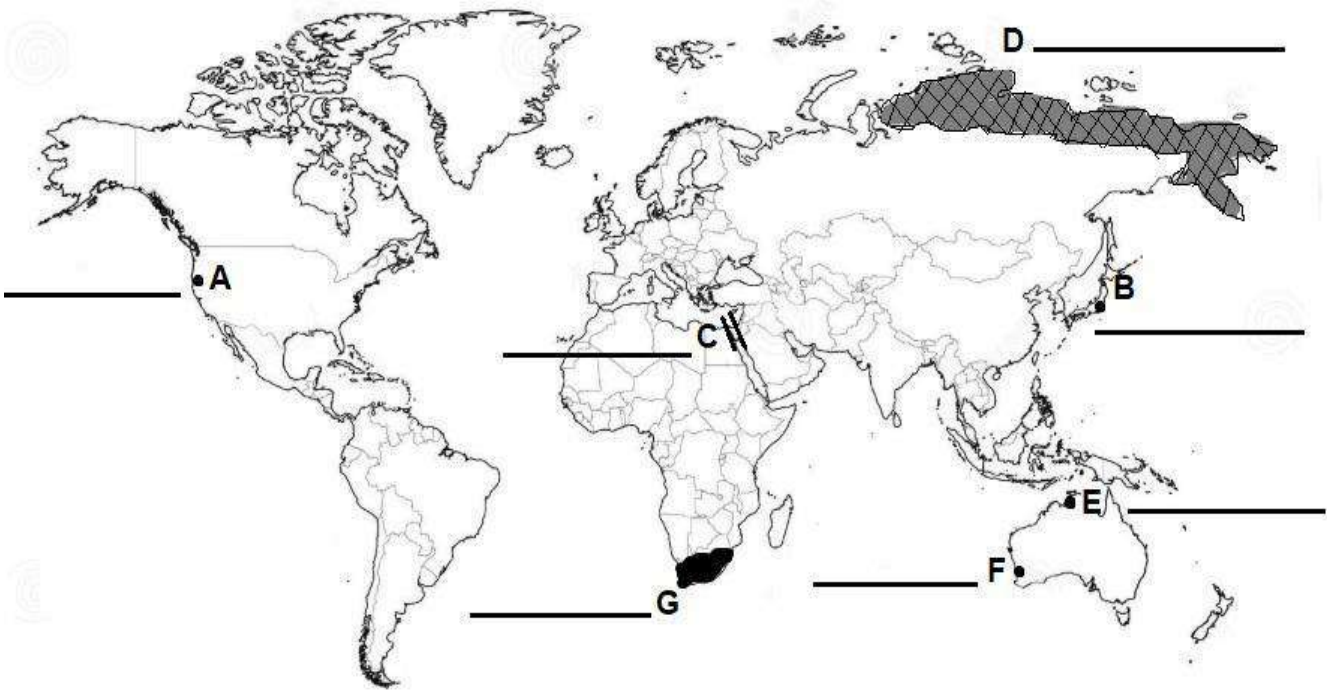
C. Name the canal that connects Red sea and Mediterranean Sea
D. Name an area of subsistence gathering in Asia.
E. Name one major airport of South America.
F. Name the westernmost terminal station of Trans-Australian Railway.
G. Name the area of extensive commercial grain agriculture in South Africa.

The following questions are for Visually Impaired Candidates only in lieu of Question No.29. Answer any five questions out of the following:
A. Name a major seaport of USA.
B. Name an important seaport located in Japan.
C. Name the canal that connects Red sea and Mediterranean Sea
D. Name an area of subsistence gathering in Asia.
E. Name one major airport of Australia.
F. Name the westernmost terminal station of Trans-Australian Railway.
G. Name the area of extensive commercial grain agriculture in South Africa.

30. Locate and label any five of the following geographical features on the Political Outline map of India with appropriate symbols:
A. An important iron ore mine in Chhattisgarh.
B. A major seaport of Goa
C. An oil refinery in UP
D. The state with lowest population density.
E. The state leading in the production of jute.
F. An international airport in Punjab.
G. An important coal mine in Tamil Nadu.

The following questions are **for visually impaired students** in lieu of Question No.30. Attempt any five.
A. Name an important iron ore mine in Chhattisgarh.
B. Name a major seaport of Goa
C. Name an oil refinery in UP
D. Name the state with lowest population density.
E. Name the state leading in the production of jute.
F. Name an international airport in Punjab.
G. Name an important coal mine in Tamil Nadu.

**29.**


D
A
B
C
E
F
G

| TEXT BOOK – I (Fundamentals of Human Geography) | | | |
|---|---|---|---|
|  |  | |  |
| Chapter – 1 (HUMAN GEOGRAPHY - NATURE AND SCOPE) | Chapter – 2 (THE WORLD POPULATION - DENSITY, DISTRIBUTION AND GROWTH) | Chapter – 3 (HUMAN DEVELOPMENT) | Chapter – 4 (PRIMARY ACTIVITIES) |
|  |  |  |  |
| Chapter – 5 (SECONDARY ACTIVITIES) | Chapter – 6 (TERTIARY AND QUATERNARY ACTIVITIES) | Chapter – 7 (TRANSPORT AND COMMUNICATION) | Chapter – 8 (INTERNATIONAL TRADE) |

| TEXT BOOK – II (India : People and Economy) | | | |
|---|---|---|---|
|  |  |  |  |
| Chapter – 1 (THE POPULATION _ DISTRIBUTION, DENSITY, GROWTH AND COMPOSITION) | Chapter – 2 (HUMAN SETTLEMENTS) | Chapter – 3 (LAND RESOURCES AND AGRICULTURE) | Chapter – 4 (WATER RESOURCES) |
|  |  |  |  |
| Chapter – 5 (MINERALS AND ENERGY RESOURCES) | Chapter – 6 (PLANNING AND SUSTAINABLE DEVELOPMENT IN INDIAN CONTEXT) | Chapter – 7 (TRANSPORT AND COMMUNICATION) | Chapter – 8 (INTERNATIONAL TRADE) |
|  |  | | |
| Chapter – 9 (GEOGRAPHICAL PERSPECTIVE ON SELECTED ISSUES AND PROBLEMS) | MAP WORK – World & India | | |