

GEOGRAPHY/GEOLOGY

Fundamentals of Human Geography

Unit I: Human Geography: Nature and Scope

Unit II: People

- Population of the World – Distribution, Density, and Growth
- Population Change-Spatial Patterns and Structure; Determinants of Population Change
- Age-Sex Ratio; Rural-Urban Composition
- Human Development – Concept; Selected Indicators, International Comparisons

Unit III: Human Activities

- Primary Activities – Concept and Changing Trends; Gathering, Pastoral, Mining, Subsistence Agriculture, Modern Agriculture; People Engaged in Agriculture and Allied Activities – Some Examples From Selected Countries
- Secondary Activities – Concept; Manufacturing: Agro-Processing, Household, Small Scale, Large Scale; People Engaged in Secondary Activities – Some Examples From Selected Countries
- Tertiary Activities – Concept; Trade, Transport, and Communication; Services; People Engaged in Tertiary Activities – Some Examples From Selected Countries
- Quaternary Activities – Concept; Knowledge-Based Industries; People Engaged in Quaternary Activities – Some Examples From Selected Countries

Unit IV: Transport, Communication and Trade

- Land Transport – Roads, Railways – Rail Network; Trans-Continental Railways
- Water Transport – Inland Waterways; Major Ocean Routes
- Air Transport – Intercontinental Air Routes
- Oil and Gas Pipelines
- Satellite Communication and Cyberspace
- International Trade – Basis and Changing Patterns; Ports as Gateways of International Trade, the Role of WTO in International Trade

Unit V: Human Settlements

- Settlement Types – Rural and Urban; Morphology of Cities (Case Study); Distribution of Megacities; Problems of Human Settlements in Developing Countries

India: People and Economy

Unit I: People

- Population: Distribution, Density and Growth; Composition of Population-Linguistic, Religious; Sex, Rural-Urban and Occupational-Regional Variations in Growth of Population
- Migration: International, National – Causes and Consequences
- Human Development – Selected Indicators and Regional Patterns
- Population, Environment, and Development

Unit II: Human Settlements

- Rural Settlements – Types and Distribution
- Urban Settlements – Types, Distribution, and Functional Classification

Unit III: Resources and Development (Periods 30)

- Land Resources – General Land Use; Agricultural Land Use – Major Crops; Agricultural Development and Problems, Common Property Resources
- Water Resources – Availability and Utilization – Irrigation, Domestic, Industrial, and Other Uses; Scarcity of Water and Conservation Methods – Rainwater Harvesting and Watershed Management (One Case Study Related to Participatory Watershed Management to Be Introduced)
- Mineral and Energy Resources – Metallic and Non-metallic Minerals and Their Distribution; Conventional and Non-conventional Energy Sources
- Industries – Types and Distribution; Industrial Location and Clustering; Changing Pattern of Selected Industries – Iron and Steel, Cotton Textiles, Sugar, Petrochemicals, and Knowledge-Based Industries; The Impact of Liberalisation, Privatisation, and Globalisation on Industrial Location
- Planning in India – Target Area Planning (Case Study); Idea of Sustainable Development (Case Study)

Unit IV: Transport, Communication and International Trade

- Transport and Communication — Roads, Railways, Waterways, and Airways; Oil and Gas Pipelines; National Electric Grids; Communication Networking – Radio, Television, Satellite, and Internet
- International Trade — Changing Pattern of India's Foreign Trade; Seaports and Their Hinterland and Airports

Unit V: Geographical Perspective on Selected Issues and Problems

- Environmental Pollution; Urban-Waste Disposal
- Urbanisation-Rural-Urban Migration; Problem of Slums