

# GEOGRAPHY

## Course Structure

Parts/Units	Topics	Marks
<b>Part A</b>	<b>Fundamentals of Human Geography</b>	<b>35</b>
Unit 1	Human Geography	30
Unit 2	People	
Unit 3	Human Activities	
Unit 4	Transport, Communication & Trade	
Unit 5	Human settlements	
	Map Work	5
<b>Part B</b>	<b>India: People and Economy</b>	<b>35</b>
Unit 6	People	30
Unit 7	Human settlements	
Unit 8	Resources and Development	
Unit 9	Transport, Communication and International Trade	
Unit 10	Geographical Perspective on selected issues & problems	
	Map Work	5
<b>Part C</b>	<b>Practical Work</b>	<b>30</b>
Unit 1	Processing of Data and Thematic Mapping	15
Unit 2	Field study of Spatial Information Technology	10
Unit 3	Practical Record Book and Viva Voce	5
<b>Total (Part A + Part B + Part C)</b>		<b>100</b>

# **Course Syllabus**

## **Part A. Fundamentals of Human Geography**

### **Unit 1: Human Geography**

- Nature
- Scope

### **Unit 2: People**

- Population:
  - Distribution
  - Density
  - 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 3: Human Activities**

- Primary activities:
  - Concept and changing trends
  - Gathering
  - Pastoral
  - Mining

- Subsistence agriculture
- Modern agriculture
- People engaged in agricultural and allied activities - some examples from selected countries
- Secondary activities-concept:
  - Manufacturing:
    - Types – household
    - Small scale
    - Large scale
  - Agro based industries
  - Mineral based industries
  - People engaged in secondary activities - some examples from selected countries
- Tertiary activities-concept:
  - Trade
  - Transport and tourism
  - Services
  - People engaged in tertiary activities - some examples from selected countries
- Quaternary activities – concept:
  - people engaged in quaternary activities - case study from selected countries

#### **Unit 4: Transport, Communication & Trade**

- Land transport:
  - Roads
  - Railways
  - Trans-continental railways
- Water transport:
  - Inland waterways

- Major ocean routes
- Air transport:
  - Intercontinental air routes
- Oil and gas pipelines
- Satellite communication and cyber space:
  - Importance and usage for geographical information
  - use of GPS
- International Trade-Bases and changing patterns:
  - Ports as gateways of international trade
  - Role of WTO in international trade
- Ocean:
  - National rights and international treaties

## **Unit 5: Human settlements**

- Settlement types:
  - Rural and urban
  - Morphology of cities (case study)
  - Distribution of mega cities
  - Problems of human settlements in developing countries

## **Map Work**

Map Work on identification of features based on 1-5 units on the outline/Physical/Political map of World.

## **B. India: People and Economy**

### **Unit 6: People**

- Population:
  - Distribution
  - Density
  - Growth
- Composition of population:
  - Linguistic
  - Religious
  - Sex
  - Rural-urban
  - 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 7: Human Settlements**

- Rural settlements:
  - Types
  - Distribution
- Urban settlements:
  - Types
  - Distribution
  - Functional classification

## Unit 8: Resources and Development

- Land resources:
  - General land use
  - Agricultural land use
  - Geographical conditions and distribution of major crops:
    - Wheat
    - Rice
    - Tea
    - Coffee
    - Cotton
    - Jute
    - Sugarcane
    - Rubber
  - Agricultural development and problems
- Water resources:
  - Availability and utilization-irrigation
  - Domestic
  - Industrial and other uses
  - Scarcity of water
  - Conservation methods:
    - Rain water harvesting
    - Watershed management
- Mineral and energy resources:
  - Distribution of metallic:
    - Iron ore
    - Copper
    - Bauxite
    - Manganese
  - Distribution of non-metallic:
    - Mica
    - Salt

- Conventional resources:
  - Coal
  - Petroleum
  - Natural gas
  - Hydroelectricity
- Non-conventional energy sources:
  - Solar
  - Wind
  - Biogas
- Conservation Industries:
  - Types
  - Factors of industrial location
  - Distribution and changing pattern of selected industries:
    - Iron and steel
    - Cotton textiles
    - Sugar
    - Petrochemicals
    - Knowledge based industries
  - Impact of liberalization, privatisation and globalisation on industrial location
  - Industrial clusters
- Planning in India:
  - Target group area planning (case study)
  - Idea of sustainable development (case study)

## **Unit 9: Transport, Communication and International Trade**

- Transport and communication:
  - Roads
  - Railways
  - Waterways

- Airways
- oil and gas pipelines
- Geographical information and communication networks
- International trade:
  - Changing pattern of India's foreign trade
  - Sea ports and their hinterland and airports

## **Unit 10: Geographical Perspective on selected issues and problems**

- Environmental pollution
  - Urban - waste disposal
- Urbanisation:
  - Rural-urban migration
  - Problems of slums
- Land degradation

## **Map Work**

- Map work on locating and labelling of features based on above units on outline map of India.

## **Part-C Practical Work**

### **Unit 1: Processing of Data and Thematic Mapping**

- Type and Sources of data:
  - Primary
  - Secondary and other sources
- Tabulating and processing of data:
  - Calculation of averages
  - Measures of central tendency

- Deviation
- Rank correlation
- Representation of data - construction of diagrams:
  - Bars
  - Circles
  - Flowchart
  - Thematic maps
  - Construction of dot
  - Choropleth maps
  - Isopleth maps
- Data analysis and generation of diagrams:
  - Graphs and other visual diagrams using computers

## **Unit 2: Field Study or Spatial Information Technology**

- Field visit and study:
- Map orientation
- Observation and preparation of sketch
- Survey on any one of the local concerns:
  - Pollution
  - Ground water changes
  - Land use and land-use changes
  - Poverty
  - Energy issues
  - Soil degradation
  - Impact of floods and drought
  - Catchment area of school

Market survey and Household survey (any one topic of local concern may be taken up for the study; observation and questionnaire survey may be adopted for the data collection; collected data may be tabulated and analysed with diagrams and maps).

Students can be given different topics to get more insight into various problems of society.

**OR**

### **Unit 3: Spatial Information Technology**

- Introduction to GIS:
  - Hardware requirements and software modules
  - Data formats
  - Raster and vector data, data input, editing and topology building
  - Data analysis
  - Overlay and buffer