









### **Table of Contents**

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#### **BACKGROUND/ RATIONALE**

Geography is introduced as an elective subject at the senior secondary stage. After ten years of general education, students branch out at the beginning of this stage and are exposed to the rigors of the discipline for the first time. Being an entry point for the higher education, students choose Geography for pursuing their academic interest and, therefore, need a broader and deeper understanding of the subject. For others, geographical knowledge is useful in daily lives because it is a valuable medium for the education of young people. Its contribution lies in the content, cognitive processes, skills and values that Geography promotes and thus helps the students explore, understand and evaluate the environmental and social dimensions of the world in a better manner.

Since Geography explores the relationship between people and their environment, it includes studies of physical and human environments and their interactions at different scales-local, state/region, nation and the world. The fundamental principles responsible for the varieties in the distributional pattern of physical and human features and phenomena over the earth's surface need to be understood properly. Application of these principles would be taken up through selected case studies from the world and India. Thus, the physical and human environment of India and study of some issues from a geographical point of view will be covered in greater detail. Students will be exposed to different methods used in geographical investigations.

#### **LEARNING OBJECTIVES**

#### The course in Geography will help learners to:

- Familiarize with key concepts, terminology and core principles of Geography.
- Describe locations and correlate with Geographical Perspectives.
- List/describe what students might see, hear, and smell at a place.
- List/describe ways a place is linked with other places.
- Compare conditions and connections in one place to another.
- Analyse/ describe how conditions in one place can affect nearby places.
- Identify regions as places that are similar or connected.
- Describe and interpret the spatial pattern features on a thematic map.
- Search for, recognize and understand the processes and patterns of the spatial arrangement of the natural features as well as human aspects and phenomena on the earth's surface.
- Understand and analyse the inter-relationship between physical and human environments and utilize such knowledge in reflecting on issues related to community.
- Apply geographical knowledge and methods of inquiry to emerging situations or problems at different levels-local, regional, national and global.
- Develop geographical skills, relating to collection, processing and analysis of spatial data/ information and preparation of report including maps and graphs and use of computers where ever possible; and to be sensitive to issues.
- The child will develop the competency to analyse, evaluate, interpret and apply the acquired knowledge to determine the environmental issues effectively.

#### **CLASS XI**

#### **Prescribed Books:**

- 1. Fundamentals of Physical Geography, Class XI, Published by NCERT
- 2. India, Physical Environment, Class XI, Published by NCERT
- 3. Practical Work in Geography Part I, Class XI, Published by NCERT

#### Links for Rationalised 2024-25 NCERT Social Science textbooks:

- 1. <a href="https://ncert.nic.in/textbook.php?kegy2=0-14">https://ncert.nic.in/textbook.php?kegy2=0-14</a>
- 2. <a href="https://ncert.nic.in/textbook.php?kegy1=0-6">https://ncert.nic.in/textbook.php?kegy1=0-6</a>
- 3. <a href="https://ncert.nic.in/textbook.php?kegy3=0-6">https://ncert.nic.in/textbook.php?kegy3=0-6</a>

#### Note:

- 1. The above textbooks are also available in Hindi medium.
- 2. Kindly refer to the latest editions of all NCERT Textbooks.

# CLASS XI COURSE STRUCTURE

## **Book- Fundamentals of Physical Geography**

Chapter No.	Chapter name	Periods	Weightage	
	Unit- I Geography as a Discipline			
1	Geography As a Discipline	5	3	
	Unit II The Earth			
2	The Origin and Evolution of the Earth	6		
3	Interior of the Earth	6	0	
4	Distribution of oceans and continents	5	9	
	Unit- III Landforms			
5	Geomorphic Processes	9		
6	Landform and their Evolution	9	6	
	Unit-IV Climate			
7	Composition and Structure of Atmosphere	3		
8	Solar Radiation, Heat balance and Temperature	7		

9	Atmospheric Circulations and Weather Systems	7	8	
10	Water in the Atmosphere	4		
11	World Climate and Climate Change (To be tested through internal assessments in the form of project and presentation)	5		
	Unit-V Water (Oceans)			
12	Water (Oceans)	6		
13	Movements of Ocean Water	8	4	
	Unit VI Life on the Earth			
14	Biodiversity and Conservation (To be tested through internal assessments in the form of project and presentation)	4	-	
	Map Work	5	5	
	Total			

# **Book – India- Physical Environment**

Chapter No.	Chapter No. Chapter Name		Weightage		
	Unit-I Introduction				
1	1 India- Location				

	Unit II Physiography			
2	Structure and Physiography	18	40	
3	Drainage System	14	13	
	Unit III Climate Vegetation and Soil			
4	Climate	16		
5	Natural Vegetation	14	12	
	Unit-IV Natural Hazards and Disasters: Causes Consequences and Mana	gement		
6	Natural Hazards and Disasters (To be tested through internal assessment in the form of Projects and presentation)	6	_	
	Мар	5	5	
	Total 78 35			

# **Geography Practical Part I**

Chapter No.	Chapter Name	Periods	Weightage
1	Introduction to Maps	6	3
2	Map Scale	6	4
3	Latitude Longitude and Time	8	4

4	Map Projections	10	4
5	Topographical Maps	10	4
6	Introduction to Remote Sensing	10	6
Practical file and Viva			5
Total		50	30

# CLASS XI COURSE CONTENT

## **Fundamentals of Physical Geography**

Chapter No. and Name	Specific Learning Objectives	Suggested Teaching Learning Process	Learning Outcomes
1 Geography as a Discipline	To define and understand the scope and nature of Geography as a discipline.	Observe your surroundings and note down the variation in natural as well as cultural phenomena. Discuss with your partner: Geography is the study of "areal differentiation."  Project Work Topic: - Forest - as a natural resource.  Prepare a map of India showing the distribution of different types of forests.  Write about the economic importance of forests for the country.  Prepare a historical account of conservation of forests in India with focus on Chipko movements in Rajasthan and Uttaranchal.	<ul> <li>At the completion of this unit students will be able to:</li> <li>Explain the meaning of geographyas an integrating discipline.</li> <li>State the fields of geography and its relationship with other disciplines.</li> <li>Explain the approaches to study geography.</li> </ul>

2 The Origin and Evolution of the Earth	<ul> <li>To acquire knowledge about earth's origin through various theories.</li> <li>To understand various stages in the evolution of the earth.</li> </ul>	<ul> <li>Watch videos of theories (Big Bang etc.) in the classroom through projector.</li> <li>Presentation and interaction about the origin of the earth by students.</li> <li>Students to explore more information related to the topic.</li> </ul>	At the completion of this unit students will be able to:  • Describe the Big Bang, Planetesimal theory, Nebular Hypothesis related to the origin of the universe.
3 Interior of the Earth	To understand that the configuration of the surface of the earth is largely a product of the exogenic and endogenic processes operating in the interior of the earth	Activity: Draw a well labelled diagram to show the interior of the earth.  Draw a diagram of a volcano and mark the following parts:  a. Magma Chamber b. Vent c. Central Pipe d. Lava flow  Draw a diagram to show the intrusive volcanic forms.  Case study of earthquakes that occurred in India and Turkey in recent times.	<ul> <li>At the completion of this unit students will be able to:</li> <li>Describe direct and indirect sources of information about the interior of the earth.</li> <li>Discuss Earthquakes—its causes and effects, define: Epicentre, Hypocentre, Earthquake waves and its propagation, Shadow zones, Measuring the intensity of Earthquakes.</li> <li>Explain the interior structure of the earth.</li> <li>Explain Volcanoes, its types and volcanic landforms.</li> </ul>

Distribution of seas and oceans	<ul> <li>To describe the theory of continental drift proposed by Alfred Wegner.</li> <li>To understand the present configuration of continents and oceans through plate tectonics theory.</li> </ul>	<ul> <li>On the outline world map mark and label the following:         <ul> <li>a. Major plate boundaries</li> <li>b. Ring of fire</li> <li>c. Hot spot Volcanoes</li> </ul> </li> <li>Draw diagrams to show different types of plate boundaries.</li> <li>Case Study:         <ul> <li>https://www.downtoearth.org.in/ne ws/natural-disasters/out-of-the-abyss-56977</li> </ul> </li> </ul>	<ul> <li>At the completion of this unit students will be able to:         <ul> <li>Provide evidence in support of continental drift and force for drifting.</li> </ul> </li> <li>Explain Post drift studies, Convectional current theory, Mapping of the ocean floor, Ocean floor configuration, Concept of sea floor spreading,</li> <li>Describe theory of plate tectonics and different types of plate boundaries.</li> <li>Trace the movements of Indian Plate.</li> </ul>
5 Geomorphic Processes	To understand various exogenic and endogenic processes responsible to bring changes in the configuration of the surface of the earth.	<ul> <li>Prepare a concept map to show different Exogenic and Endogenic Processes.</li> <li>Students will prepare concept map on denudational processes.</li> <li>Study types of weathering: Physical, Chemical, Biological and their importance for human being.</li> </ul>	<ul> <li>At the completion of this unit students will be able to:</li> <li>Differentiate between geomorphic processes and geomorphic agents.</li> <li>Describe factors that affect soil formation.</li> <li>Define the following terms: Exfoliation, Denudation, Weathering etc.</li> </ul>

		Study types of mass movements and prepare a mind map.	
6 Landforms and their Evolution	To understand the nature of different erosional and depositional agents and landforms made by them.	<ul> <li>Visit nearby landforms and draw sketches.</li> <li>Draw neat and well labelled diagrams of landforms created by running water, wind, waves etc.</li> <li>Watch videos of different landforms created by running water, underground water, glacier, wind, sea waves etc.</li> <li>Find out the advantages and disadvantages of different landforms from the internet.</li> <li>Prepare charts to show different landforms.</li> </ul>	<ul> <li>At the completion of this unit students will be able to:</li> <li>Describe and draw various erosional and depositional landforms created by different agents.</li> <li>Students will be able to compare and analyse various landforms.</li> <li>Locate different landforms (mountains, plateaus, plains) on the outline map of the world.</li> </ul>
7 Composition and Structure of Atmosphere	To understand the composition and structure atmosphere.	<ul> <li>Watch a video on the importance of different layers of the atmosphere.</li> <li>Write songs based on different seasons.</li> <li>Draw a neat and well labelled diagram to show different layers</li> </ul>	At the completion of this unit students will be able to:  • Describe the composition and characteristics of different layers of atmosphere.

		of the atmosphere and write the importance of each layer.	Correlate climate change with Sustainable Development Goals13: Climate Action.
8 Solar Radiation, Heat Balance and Temperature	To understand the heating and cooling of the atmosphere and the resultant temperature distribution over the surface of the earth.	<ul> <li>Students to learn about the three different modes of heat transfer—convection, conduction, radiation— with the help of an activity and how they are related to the Sun and life on our planet.</li> <li>Draw a diagram to show the passage of solar radiation through the atmosphere.</li> <li>Study figure 9.4 and 9.5 and write the distribution of surface temperature in the month of January and July.</li> </ul>	<ul> <li>At the completion of this unit students will be able to:</li> <li>Differentiate between solar radiation and terrestrial radiation.</li> <li>Give reasons for variability of insolation at the surface of the earth.</li> <li>Explain the heat budget of the planet earth.</li> <li>Describe factors controlling temperature distribution.</li> <li>Explain inversion of temperature.</li> </ul>
9 Atmospheric Circulation and Weather Systems	<ul> <li>To understand the general atmospheric circulation and the forces that control the circulation.</li> <li>To understand the meaning of various terms related to the topic.</li> <li>To know the causes and consequences of air circulation.</li> </ul>	<ul> <li>Students may read various theories and articles related to atmospheric circulation and weather system.</li> <li>Students are advised to watch videos on movements of winds:</li> </ul>	<ul> <li>At the completion of this unit students will be able to:</li> <li>Describe the permanent pressure belts and the prevailing winds.</li> <li>Explain different types of winds.</li> <li>Differentiate between tropical and extra tropical cyclones.</li> </ul>

		<ul> <li>The students can be encouraged to prepare presentation on different topics in the chapter.</li> <li>Examine the weather conditions necessary for the formation of cyclones, tornadoes, hurricanes etc.</li> </ul>	Realize how global warming is result of atmospheric pollution and how it can be minimised if not prevented.
10 Water in the Atmosphere	To understand continuous exchange of water between the atmosphere, the oceans and the continents through the processes of evaporation, transpiration, condensation and precipitation.	<ul> <li>Make a list of different forms of condensation and precipitation and define them.</li> <li>Draw diagrams of different types of rainfall.</li> <li>On a world map mark and label areas of heavy, moderate, low and inadequate rainfall.</li> </ul>	<ul> <li>At the completion of this unit students will be able to:</li> <li>Explain the process of precipitation and its different forms.</li> <li>Analyse the variation in the distribution of rainfall in the world.</li> </ul>
11 World Climate and Climate Change  (To be tested through internal assessments in the form of project and presentation)	<ul> <li>To define three broad approaches that have been adopted for classifying climate – Empirical Classification, Genetic Classification, and Applied Classification.</li> <li>To Describe various types of climates and their groups/ subtypes.</li> </ul>	<ul> <li>Classify climate based on various schemes by Koeppen with the help of a mind map.</li> <li>Describes the causes and effects of global warming.</li> <li>Evaluate the climate changes in the recent past.</li> </ul>	At the completion of this unit students will be able to:  • The topic can be presented in class through PPT or Project Work after conducting extensive and guided research by students.

	<ul> <li>To analyse Koeppen's Scheme of Classification of Climate.</li> <li>To explain climate change and related concepts.</li> <li>To evaluate the climate changes in the recent past.</li> </ul>		
12 Water (Oceans)	<ul> <li>To explain water cycle and summarize how an increase in demand for water leads to a water crisis.</li> <li>To Illustrate major and minor ocean floor features. (midoceanic ridges, seamounts, submarine canyons, guyots, and atolls)</li> <li>To describe horizontal and vertical distribution of oceanic temperature.</li> <li>To evaluate the factors affecting the salinity of ocean waters.</li> </ul>	<ul> <li>Draw a diagram to show major and minor features of ocean floor.</li> <li>Study figure 13.5 and analyse the horizontal distribution of salinity in different oceans.</li> <li>Locate and label the major seas on a political map of the world (As given in map list).</li> </ul>	<ul> <li>At the completion of this unit students will be able to:</li> <li>Describe the basic processes involved in hydrological cycle with the help of a well labelled diagram.</li> <li>Describe the relief features of the ocean floor.</li> <li>Explain the process of heating and cooling of oceanic water and factors that affect temperature distribution in the ocean.</li> <li>Describe the salinity of ocean waters.</li> </ul>
13 Movements of Ocean Water	To define and differentiate between tides and currents.	Mark and label the major warm and cold currents on an outline world map. (As per the given map list)	At the completion of this unit students will be able to:  • Explain tides, currents and waves.

	<ul> <li>To describe the formation of sea waves.</li> <li>To analyse the importance of</li> </ul>	Draw a diagram of spring and neap tides.	<ul> <li>Analyse the economic significance of tides.</li> <li>Describe ocean currents and the</li> </ul>
	<ul> <li>tides.</li> <li>To classify and describe major ocean currents and its effects.</li> </ul>		<ul><li>forces that influence them.</li><li>Distinguish between cold and warm ocean currents.</li></ul>
14 Biodiversity and Conservation	To explain the three major realms of the environment.	Make a list of flora and fauna found in your surroundings and	At the completion of this unit students will be able to:
oonoor valion	To explain the concept of ecology.	make a scrap book containing information and pictures of at least ten species.	Describe the characteristic features of the biosphere.
	<ul> <li>To analyse the features and types of aquatic ecosystems and biomes, with examples.</li> </ul>	iodot toti opodios.	Define ecology and related terms and explain the need for ecological balance.
	biomes, war examples.		Recognize the abiotic and biotic factors of the ecosystem.
			Compare and contrast the features of five major biomes of the world – forest, grassland, desert, aquatic, and altitudinal.

## **India Physical Environment**

Chapter No. and Name	Specific Learning Objectives	Suggested Teaching Learning Process	Learning Outcomes
1 India- Location	To understand the geographical location of India and its significance.	<ul> <li>On an outline map of India mark all the neighbouring countries and compare the size of India with its neighbours.</li> <li>Make a list of all the states that share common boundary with our neighbouring countries.</li> <li>Mark and label the land boundary and coastline on an outline map of India.</li> <li>On a political map of India mark and label the states and UTs.</li> </ul>	<ul> <li>At the completion of this unit students will be able to:</li> <li>Describe the location of India mentioning the surrounding water bodies.</li> <li>Analyse the implications of living in a country with vast longitudinal and latitudinal extent and its impact on the standard time of India.</li> <li>Explain the vastness of India and the diversity that comes along with it.</li> </ul>
2 Structure and Physiography	<ul> <li>To understand the evolution of different geological structures in India.</li> <li>To acquire knowledge about physiographic divisions and their subdivisions.</li> </ul>	<ul> <li>Identify the physiographic and geological region you live in. Discuss the impact of physiography on the development of your region.</li> <li>On an outline map of India mark and label the physiographic divisions of India.</li> </ul>	At the completion of this unit students will be able to:  Explain the evolution of various geological structures in different parts of the country.  Describe major physiographic divisions and the processes of their formation.

			<ul> <li>Locate the major physical features on the map of India.</li> </ul>
3 Drainage System	<ul> <li>To understand the drainage system and drainage patterns of Indian rivers.</li> <li>To understand the extent of use ability of river water and the problems associated with it.</li> </ul>	<ul> <li>Have a group discussion in your class about floods-their positive and negative impact.</li> <li>Make a list of east flowing and west flowing rivers of Peninsular region.</li> </ul>	<ul> <li>At the completion of this unit students will be able to:</li> <li>Understand the major drainage systems of India.</li> <li>Analyse the causes of river water pollution.</li> <li>Differentiate between Himalayan and Peninsular rivers.</li> </ul>
4 Climate	<ul> <li>To understand Indian monsoon: and its mechanism.</li> <li>To list the weather conditions that prevail during different seasons.</li> <li>To analyse the variation in distribution of rainfall in India.</li> </ul>	<ul> <li>Students to mark and label the hottest, coldest, driest and wettest places in India. (on a political map)</li> <li>Students should be made to understand Air Quality Index.</li> <li>(The Air Quality Index is a way for the government to alert people to the quality of the air and how bad the air pollution is in an area or city.</li> <li>Colours are used to indicate the air quality.</li> <li>Green - the air is good.</li> <li>Yellow - the air is moderate</li> </ul>	<ul> <li>At the completion of this unit students will be able to:</li> <li>Discuss the factors affecting climate of the country and its effect on country's economic life.</li> <li>Understand the annual cycle of four main seasons in India.</li> <li>Able to realise the causes and problems of climate changes.</li> <li>Able to understand the concept of Global Warming.</li> </ul>

		<ul> <li>Orange - the air is unhealthy for sensitive people like the elderly, children, and those with lung diseases.</li> <li>Red – Unhealthy</li> <li>Purple - Very unhealthy</li> <li>Maroon – Hazardous)</li> </ul>	
5 Natural Vegetation	To understand the relationship between vegetation belts and the climate.	<ul> <li>Students would be able to enhance their communication skills by debating on positive and negative impact of human activities on forest cover and wildlife.</li> <li>To mark all major types of forests on a map of India.</li> <li>Class can be divided into groups to collect information about people's participation in the conservation of forests and wildlife.</li> </ul>	<ul> <li>At the completion of this topic the students will be able to:</li> <li>The students will be able to recognise the importance of forest cover in the country and its spatial distribution.</li> <li>They will learn about number of species of plants and animals in India.</li> <li>They will appreciate the efforts in conservation of forests and wildlife.</li> </ul>
6 Natural Hazards and Disasters  (To be tested through internal assessment in the	To make students aware about natural hazards and disasters happening in various parts of the country, their impact and ways to mitigate the damage caused by them.	<ul> <li>Divide your class into groups and allocate one disaster to each group.</li> <li>Every group should think of themselves as living in a disaster prone area of their allocated topic.</li> </ul>	At the completion of this topic the students will be able to:  Classify different types of hazards and disasters.

form of Projects and presentation)	All groups would give a presentation on causes, impact and risk reduction of that disaster.	Describe causes, effects and mitigation policy for various natural disasters.
	uisaster.	<ul> <li>Identify and locate regions prone to different disasters on the map.</li> </ul>
		<ul> <li>Understand the concept of disaster management.</li> </ul>

# Map Items for locating and labelling on outline political World Map

## **Fundamentals of Physical Geography**

Chapter No. and Name	Map Work
4 Distribution of oceans and continents	<ul> <li>Political Map of all Continents of the world.</li> <li>Major Oceans of the world: Indian Ocean, Pacific Ocean, Atlantic Ocean, Arctic Ocean, Southern Ocean</li> <li>Major lithospheric plates and Minor lithospheric plates, Ring of fire (Pacific Ocean), Mid-Atlantic Ridge.</li> </ul>
9 Atmospheric Circulations and Weather Systems	<ul> <li>Major Hot Deserts of the world:</li> <li>Mojave Desert- Nevada, US</li> <li>Patagonian Desert- Argentina</li> <li>Sahara- Africa</li> <li>Gobi Desert- Mongolia, Asia</li> <li>Thar desert- India</li> <li>Great Victoria desert- Australia</li> </ul>

12 Water(Oceans)	<ul> <li>Major Seas</li> <li>Black sea</li> <li>Baltic sea</li> <li>Caspian Sea</li> <li>Mediterranean Sea</li> <li>North Sea</li> <li>Red sea</li> <li>Bay of Fundy (Canada)-Famous for the highest tides in the world</li> </ul>
13 Movements of Ocean Water	<ul> <li>OCEAN CURRENTS-Cold currents</li> <li>Humboldt c.</li> <li>California c.</li> <li>Falkland c.</li> <li>Canaries c.</li> <li>West Australian c.</li> <li>Oyashio c.</li> <li>Labrador c.</li> </ul>
	<ul> <li>Warm currents</li> <li>Alaska c.</li> <li>Brazilian c.</li> <li>Aughlas c.</li> <li>Kuroshio c.</li> <li>Gulf stream c.</li> </ul>
14 Biodiversity and Conservation	Ecological hotspots  • Eastern Himalaya, India

Western ghats, India     Indonesia, Asia     Fastern Madagagaga, Africa	
<ul> <li>Eastern Madagascar, Africa</li> <li>Upper Guinean forests, Africa</li> <li>Atlantic forest, Brazil</li> <li>Tropical Andes</li> </ul>	

# Map Items for locating and labelling on outline political map of India India Physical Environment

Chapter No and Name	Map Work
1 India- Location	<ul> <li>Latitudinal extent of India</li> <li>Longitudinal extent of India</li> <li>Standard Meridian of India</li> <li>Important latitude passing through India (Tropic of Cancer)</li> <li>Southern Most Point of mainland of India (Kanya Kumari)</li> </ul>
2 Structure and Physiography	<ul> <li>Mountains: Karakoram Range, Garo- Khasi- Jaintia hills, Aravalli Range, Vindhyan Range, Satpura Range, Western ghats &amp; Eastern ghats</li> <li>Peaks: K2, Kanchenjunga, Nandadevi, Nanga Parvat, Namcha Barwa and Anaimudi</li> <li>Passes: Shipkila, Nathula, Palghat, Bhor ghat and Thal ghat</li> <li>Plateaus: Malwa, Chhotnagpur, Meghalaya and Deccan Plateau.</li> <li>Coastal Plains: Saurashtra, Konkan, North and South Kanara, Malabar, Coromandel and Northern Circars</li> <li>Islands: Andaman &amp; Nicobar Islands and Lakshadweep Islands</li> </ul>

3 Drainage System	<ul> <li>Rivers: Brahmaputra, Indus, Satluj, Ganga, Yamuna, Chambal, Damodar, Mahanadi, Krishna, Kaveri, Godavari, Narmada, Tapti and Luni</li> <li>Lakes: (Identification)Wular, Sambhar, Chilika, Kolleru, Pulicat &amp; Vembanad</li> <li>Straits, Bays, Gulfs: Palk Strait, Rann of Kachch, Gulf of Kachch, Gulf of Mannar &amp; Gulf of Khambat</li> </ul>
4 Climate	<ul> <li>Area with highest temperature in India</li> <li>Area with lowest temperature in India</li> <li>Area with highest rainfall in India</li> <li>Area with lowest rainfall in India</li> </ul>
5 Natural Vegetation	(Identification on an outline map of India) Tropical evergreen, Tropical deciduous, Tropical thorn, Montane and Littoral/ Swamp forests. Wildlife reserves: (locating and labeling)
	<ul> <li>National Parks: Corbett, Kaziranga, Ranthambore. Shivpuri, Simlipal</li> <li>Bird Sanctuaries: Keoladev Ghana and Ranganathitto</li> <li>Wild life Sanctuaries: Periyar, Rajaji, Mudumalai, Dachigam,</li> </ul>

#### **Guidelines for Internal Assessment/ Geography Practical**

- 1. A practical file must be prepared by students covering all the topics prescribed in the practical syllabus.
- 2. The file should be completely handwritten with a cover page, index page and acknowledgment.
- 3. All practical works should be drawn neatly with appropriate headings, scale, index etc. Data can be taken from the NCERT textbook.
- **4.** The practical file will be assessed at the time of term end practical examinations.
- 5. A written exam of 25 marks will be conducted based on prescribed practical syllabus.
- **6.** Viva will be conducted based on practical syllabus only.
- 7. Written Exam -25 Marks
- 8. Practical file- 03 Marks
- **9.** Viva- 02 Marks

#### **CLASS XII**

#### **NCERT Prescribed Textbook**

- 1. Fundamentals of Human Geography
- 2. India- People and Economy
- 3. Practical work in Geography- Part II

#### Links for Rationalised 2024-25 NCERT textbooks:

- 1. https://ncert.nic.in/textbook.php?leav1=0-8
- 2. <a href="https://ncert.nic.in/textbook.php?legv2=0-9">https://ncert.nic.in/textbook.php?legv2=0-9</a>
- 3. <a href="https://ncert.nic.in/textbook.php?legy3=0-">https://ncert.nic.in/textbook.php?legy3=0-</a>

#### Note:

- 1. The above textbooks are also available in Hindi medium.
- 2. Kindly refer to the latest editions of all NCERT Textbooks.

# CLASS XII COURSE STRUCTURE

## **Book- Fundamental of Human Geography**

Chapter No.	Chapter Name	No. of periods	Weightage		
	Unit I				
1	Human Geography	7	3		
	Unit II				
2	The World Population Density Distribution and Growth	9	0		
3	Human Development	7	8		
	Unit III				
4	Primary Activities	12			
5	Secondary Activities	10	19		
6	Tertiary and Quaternary Activities	10			
7	Transport, Communication and Trade	15			

8	International Trade		
Map Work (Ba	sed on identification of features on World Political Map)	10	5
Total		90	35

## **Book-India People and Economy**

Chapter No.	Chapter Name	No. of Periods	Weightage		
	Unit I				
1	Population Distribution Density Growth and Composition	10	5		
	Unit II				
2	Human Settlements	8	3		
	Unit III				
3	Land Resources and Agriculture	9			
4	Water Resources	9	10		
5	Mineral And Energy Resources	9			
6	Planning and Sustainable Development in Indian Context	7			
	Unit IV				

Total		90	35			
Map Work (E	10	5				
9	Geographical Perspective on selected issues and problems	8	5			
	Unit V					
8	International Trade	9	7			
7	Transport and Communication 11		7			

# **Geography Practical-II**

Chapter No.	Chapter Name	Period	Weightage
1	Data-its source and Compilation	5	
2	Data Processing	8	18
3	Graphical representation of Data	15	
4	Spatial Information Technology	12	7
Practical Record Book and Viva Voce			5
Total		40	30

# CLASS XII COURSE CONTENT

## **Book- Fundamental of Human Geography**

Chapter No. and Name	Specific Learning Objectives	Suggested Teaching Learning Process	Learning Outcomes
1 Human Geography	To define Human Geography and describe the nature and scope of Human Geography as a discipline.	<ul> <li>Case Study on determinism and possibilism given in NCERT to be used to explain the concept.</li> <li>Prepare a concept map of the chapter explaining the following: Definition of Human Geography, nature, scope, schools of thought, branches of Human Geography.</li> </ul>	
2 The World Population-	To familiarize learners with some basic concepts of Population Geography.	On a world map mark and label ten most populous countries of the world.	At the completion of this unit students will be able to:

distribution, density and growth	To understand the patterns of population distribution in the world and correlate the factors influencing population distribution.	<ul> <li>Class discussion on how science and technology helped in population growth.</li> <li>List the reasons for human migration.</li> <li>On the world map identify the countries of Europe and Asia with negative growth rate of population and African countries with growth rate of population more than three percent.</li> <li>Students can be asked to find out the density of population of their respective state/ district/ city.</li> <li>Case Study on Thomas Malthus</li> </ul>	<ul> <li>using Demographic Transition Theory.</li> <li>Suggest measures to control population growth.</li> <li>Define the following terms:</li> </ul>
		<ul><li>Case Study on Thomas Malthus (optional)</li><li>Prepare a glossary.</li></ul>	Growth of population, Natural growth of population, Positive growth of population, Negative growth of population
3 Human development	To understand the concept human development introduced by Dr. Mehbub UI Haq and Prof. Amartya Sen.	<ul> <li>The lesson can be introduced by asking students to discuss with their peer group: What is a meaningful life?</li> <li>Discuss: How BetiBachao and Beti Padhao</li> </ul>	At the completion of this unit students will be able to:  Differentiate between growth and development Explain the three basic indicators of human

		programme introduced by the Government of India can address the issue of declining sex ratio and make life more meaningful for girls.  • Enact a play to show how choices get limited due to lack of capability in areas of income, health care and education.  • Interview a lady vegetable vendor, cobbler and a sweeper in the community and note how their opportunities were limited because of gender, caste and income.	<ul> <li>development and measure the level of Human Development.</li> <li>Describe Human Development Index published by UNDP.</li> <li>Compare HDI with Human Poverty Index.</li> <li>Explain the key pillars of human development with examples.</li> <li>Compare Income approach, Welfare approach, Basic Needs approach and Capability approach to understand the concept Human Development.</li> <li>Categories countries on the basis of their HDI and explain their characteristics.</li> </ul>
4 Primary Activities	<ul> <li>To understand various categories of economic activities.</li> <li>To describe Primary activities and relate the physical and social factors that affect the type of primary activities practised in different regions of the world.</li> </ul>	<ul> <li>Class discussion: Why are people in coastal areas and plains engaged in fishing and agriculture?</li> <li>Describe the life of a nomadic herder. (Gaddi and Bakarwal tribe)</li> <li>Mark and label the following on an outline world map:</li> </ul>	<ul> <li>At the completion of this unit students will be able to:</li> <li>Define the following terms:         Economic activity, Primary activities, Red Collar Worker, Pastoral Nomadism</li> <li>Explain food gathering as an economic activity.</li> <li>Distinguish between pastoral nomadism and commercial livestock rearing.</li> </ul>

- To explain main features of different types of agricultural system practised in the world.
- **a.** Major areas of subsistence gathering
- **b.** Major areas of nomadic herding of the world
- **c.** Major areas of commercial livestock rearing
- **d.** Major areas of extensive commercial grain faming
- Major areas of mixed farming of the World

- Differentiate between primitive subsistence and intensive subsistence farming.
- Describe the characteristic features of plantation agriculture as a type of commercial farming.
- Analyse why is there low yield per acre but high yield per person in areas of extensive grain cultivation.
- Compare and contrast the farming practices in the developed urban areas of the world.
- Analyse how the model of Kolkhoz introduced in the erstwhile USSR boost agricultural production.
- Examine the reasons for success of cooperative farming in the European countries.
- Differentiate between open cast mining and shaft mining.
- Discuss how mining can have impact on humans and environment.

#### 5 Secondary Activities

- To develop understanding of secondary activities with emphasis on manufacturing industries.
- To give an overview of manufacturing processes, types, its significance and recent changes.
- The students can be asked to prepare a list of factory-made goods they use in their daily life and categorize them as biodegradable and nonbiodegradable.
- List out ten global brands, their logos and products.
- The students can be taken out for a visit to local industry and asked to prepare a report on their observations regarding raw material used, finished product, production process, labour inputs, environmental impact and social responsibility.
- The students can be asked to prepare a sketch, poster, poem or write-up about the environmental conditions surrounding an industry.

# At the completion of this unit students will be able to:

- Explain key concepts such as, large-scale manufacturing, high technology industry, organizational set up, foot-loose industries, Agri business etc.
- Identify and explain the factors affecting the location of an industry.
- Differentiate between different types of industries on the basis of size, raw material, ownership and output.
- Differentiate between cottage industry and small-scale industry.
- Explain the importance of hightech industries and reason for them being attracted to the peripheral areas of major metropolitan cities.
- Compare large scale industry and modern high-tech industry with examples.
- Understand and analyses the interrelationship between

			industrial development and standard of living.
Tertiary and Quaternary Activities	To understand different types of tertiary activity and its importance in the economy.	<ul> <li>Make a list of economic activities under different categories.</li> <li>Make a list of departmental stores and chain stores that you visit regularly.</li> <li>Class discussion on: How convenient and beneficial the fast-growing service sector in the world.</li> </ul>	<ul> <li>At the completion of this unit students will be able to:</li> <li>Compare and contrast traditional and modern economic activities.</li> <li>Students correlate tertiary activities and their role in the economic development of a country.</li> <li>Describe different types of tertiary activities.</li> <li>Discuss different types of trading centres found in rural and urban areas and role played by them in local economy.</li> <li>Describe quinary activities and its role in advanced economies.</li> <li>Discuss how tertiary, quaternary and quinary activities have replaced jobs in primary and secondary sectors.</li> <li>Define the following terms: BPO, Outsourcing, KPO, Departmental Store, ChainStore, Wholesale trading</li> </ul>

# 7 Transport and Communication

- To acquire knowledge about various modes of transport in different continents.
- To compare and synthesize the information about major transport routes around the globe.
- To understand the development of communication networks and their impact on the modern world.
- Students can be asked to do a survey of their class about the means of transport being used by students to reach school.
   Prepare a Bar diagram with the help of the data collected.
- Analyze the connection between physical landscape and development of various modes of transport.
- Mark and label the terminal stations of Trans-Siberian Railway, Trans Canadian Railway and Trans Australia Railway on an outline world map.
- Draw a sketch map of Suez Canal, Panama Canal, St Lawrence Sea ways and Rhine waterways, and mark them on an outline map of the world.
- On an outline map of the world mark and label the following major airports of each continent:
- **a. Asia:** Tokyo, Beijing, Mumbai, Jeddah, Aden
- **b.** Africa: Johannesburg & Nairobi
- **c. Europe:** Moscow, London, Paris, Berlin and Rome

# At the completion of this unit students will be able to:

- Compare and contrast various modes of transport.
- Explain the relationship of transport and communication networks to economic development of a region.
- Describe the major highways and major rail networks of different continents.
- Discuss the location and economic significance of Trans-Siberian Railway, Trans Canadian Railway, The Union and Pacific Railway and Trans Australian Railway.
- Describe the location and the economic importance of the major sea routes of the world.
- Discuss how Suez Canal and Panama Canal serve as major gateways of commerce for both the eastern and the western world.
- Discuss how the modern communication systems have made the concept of global village a reality.

8	Familiarize the students with	<ul> <li>d. North America: Chicago, New Orleans, Mexico City</li> <li>e. South America: BuenosAires, Santiago</li> <li>f. Australia: Darwin and Wellington</li> <li>Discuss: How International</li> </ul>	At the completion of this unit
International Trade	the basic concepts and principles of international trade.  To understand the basis of international trade, Balance of trade and types of international trade.  Gain knowledge about the concept of Dumping.  To outline the historical perspective of globalization and role of WTO, its functions and its implications on the world trade.  Examine the importance of sea ports as gateways of international trade	trade was carried out in the past vis-a-vis present times.  Study the data given on table 9.1 and compare world import and export to calculate balance of trade and analyse its implication.  Read the case study on dumping and discuss how dumping is becoming a serious concern among trading nations.  Prepare a concept map of the chapter.  Mark and label the headquarter of WTO on an outline world map.  Mark and label the following major sea ports of the world:  a. Europe: North Cape, London, Hamburg North America: Vancouver, San Francisco, New Orleans  b. South America: Rio De Janeiro,	

Colon, Valparaiso Africa: Suez and Cape Town c. <b>Asia:</b> Yokohama, Shanghai, Hong Kong, Aden, Karachi,
Kolkata d. <b>Australia</b> : Perth, Sydney, Melbourne

### India People and Economy

Chapter No. and Name	Specific Learning Objectives	Suggested Teaching Learning Process	Learning Outcomes
Population: Distribution Density, Growth and Composition	<ul> <li>To correlate population distribution and density with the physiography of India.</li> <li>To familiarize students with the demographic attributes of India</li> </ul>	<ul> <li>Learner may be asked to refer to an Atlas to correlate relief map of India and map of population distribution and density and write their observation and share with their classmates.</li> <li>Prepare a choropleth map showing the state wise density of population of India.</li> <li>Represent the data on decadal growth rate (given on page 5 NCERT) in India using suitable statistical diagram.</li> <li>Refer to Census of India website to collect data on population of India.</li> <li>Prepare a dot map showing the</li> </ul>	<ul> <li>At the completion of this unit students will be able to:</li> <li>Differentiate between distribution of population and density of population.</li> <li>Define: Physiological Density, Agricultural Density, Population doubling time, Working Population, Participation Rate, Main Worker, Marginal Worker, Rural Population, Urban Population, Adolescent Population.</li> <li>Discuss the factors responsible for uneven distribution of population in India.</li> <li>Explain trends of population</li> </ul>

		distribution of India's Population.  Compare the growth rate of population of different states between 1991-2001 and 2001-2011.	growth in India since 1901.  Describe rural-urban population composition, religious composition linguistic composition and sectoral composition of work force in India.  Discuss the occupational structure of India's population.
2 Human Settlements	To understand how the form and size of settlement of any particular region reflects human relationship with the environment.	<ul> <li>The students will prepare a line graph to show the growth of urban population in India since 1901.</li> <li>The students will mark and label the million plus cities of all the states on a political map of India.</li> <li>Case Study: Amravati <a href="https://smartcities.gov.in/sites/default/files/SmartCityGuidelines.pdf">https://smartcities.gov.in/sites/default/files/SmartCityGuidelines.pdf</a></li> <li>https://assccl.ap.gov.in/ASSCCL/views/V1/Home.aspx</li> </ul>	<ul> <li>At the completion of this unit students will be able to:</li> <li>Differentiate between rural and urban settlement.</li> <li>Describe the factors that govern the types of rural settlement in India.</li> <li>Compare and contrast clustered, semi clustered, Hamleted and dispersed settlement with examples.</li> <li>Describe the evolution of towns in India since prehistoric times.</li> <li>Classify towns on the basis of their functions.</li> </ul>

#### 3 Land Resources and Agriculture

- To familiarise students with the land-use categories as maintained in the land revenue records.
- To analyse the changes in landuse pattern registered in India due to change in shares of primary, secondary and tertiary sectors in GDP.
- The students will study and document the land use around their school and speak to their elders to find out changes registered in land use.
- The students will read and interpret the bar graph (fig 5.1) comparing the changes in land use in India between 1950-51 and 1914-15.
- Using the data given in the appendix (vi) the students will Work out the actual increase and rate of increases for all the land use categories between 1950–51 and 2014–15.
- The students will prepare pie graphs to show the land use categories in 1950-51 and 1914-15.
- Prepare a pie chart showing the composition of total cultivable land in the country.
- The students will calculate cropping intensity using datafrom table 5.1
- The students will represent the geographical conditions required

## At the completion of this unit students will be able to:

- Name and define the land use categories.
- Compare the Changes in shares of Land-use Categories in India between 1950 and 2014.
- Discuss the importance of common property resources for the community.
- Compare dryland and Wetland farming and evaluate its importance.
- Compare the geographical conditions required for the growth of the following crops and their distribution/ growing areas.
- Rice, Wheat, Jowar, Pulses,
   Oilseeds, Cotton, Jute,
   Sugarcane, Tea, Coffee
- Evaluate technological developments that have taken place in Indian agriculture since Independence.
- Discuss the challenges faced bythe Indian farmers and suggest measures to overcome them.

		for the growth of different crops in a tabular form and compare them.  On political map of India the students will mark and label threelargest producing states of Rice, Wheat, Jowar, Pulses, Oilseeds, Cotton, Jute, Sugarcane, Tea and Coffee.	
4 Water Resources	To familiarise students about the water resources available in India and the factors that determine spatial distribution of the available water resources in the country and its utilization.	<ul> <li>List out the major sources of water.</li> <li>Discuss the interrelationship between physical and human environment and their impact from local to global.</li> <li>Ralegan Siddhi case study to be discussed to understand the holistic impact of Watershed development in any place.</li> <li>Students can also be encouragedto read about Haryali, Neeru-Meeru (Water and You) programme in Andhra Pradesh and Arvary Pani Sansad in Alwar, Rajasthan</li> </ul>	<ul> <li>At the completion of this unit students will be able to:</li> <li>Describe the available water resources in India.</li> <li>Evaluate the water demand and supply in India.</li> <li>Discuss the reasons for water scarcity in the country.</li> <li>Discuss water resources in India, its geographical distribution, sectoral utilization, and methods of its conservation and management.</li> <li>Recognize various emerging water problems and analyse the causes for deterioration of quality of water.</li> <li>Evaluate the scope to use rainwater harvesting techniques to conserve precious water</li> </ul>

			resources.
Mineral and energy resources	<ul> <li>To know about distribution of various minerals in the world.</li> <li>To understand and realize the importance of minerals in human life.</li> <li>To create an awareness about nature of different minerals and how to sustain them for the future.</li> </ul>	<ul> <li>The students should be encouraged to read newspaper regularly and discuss environmental impact of mining.</li> <li>The students should create awareness in school through posters and role play about the use of renewable resources and conservation of energy resources.</li> <li>Prepare a table to present the spatial pattern of the following minerals under the given headings: (Properties, Total Reserves, Distribution, Mines)</li> <li>Iron Ore, Manganese, Bauxite, Copper, Mica, Coal, Petroleumand natural Gas.</li> </ul>	<ul> <li>At the completion of this unit students will be able to:</li> <li>Classify minerals on the basis of chemical and physical properties.</li> <li>Describe the major mineral belts of India and mark them on an outline map of India.</li> <li>Describe different types of nonconventional mineral resources.</li> <li>Analyse why the renewable energy resources will be the future source of resources.</li> <li>Suggest measures to conserve our non-renewable resources.</li> <li>On an outline Political Map of India mark and label the following:</li> <li>g. Iron-ore mines: Mayurbhanj, Bailadila, Ratnagiri, Bellary</li> <li>h. Manganese mines: Balaghat, Shimoga</li> <li>i. Copper mines: Hazaribagh, Singhbhum, Khetari</li> <li>j. Bauxite mines: Katni, Bilaspur and Koraput</li> <li>k. Coal mines: Jharia, Bokaro, Raniganj, Neyveli</li> <li>l. Oil Refineries: Mathura, Jamnager, Barauni</li> </ul>

Planning and sustainable development in Indian Context	To understand the need for centralised planning (sectoral planning and regional planning) to accelerate uniform economic development over space as well the role of NITI Aayog.	<ul> <li>Case Study – Integrated Tribal Development Project in Bharmaur Region.</li> <li>Case Study- Indira Gandhi Canal (Nahar) Command Area.</li> <li>Critically evaluate the need for, aims of, and impacts of irrigation on Indira Gandhi Canal (Nahar) Command Area.</li> </ul>	<ul> <li>At the completion of this unit students will be able to:</li> <li>Develop an understanding about various types of planning.</li> <li>Justify the need for target areas and target groups planning by the Planning Commission with examples.</li> <li>Explain the aims and approaches of the Hill Area Development Programme, Drought prone area Programme,</li> <li>Critically evaluate the aims and social benefits of ITDP in the Bharmaur tribal region.</li> <li>Evaluate the measures that can be taken to promote sustainable development in Indira Gandhi Canal Command Area.</li> </ul>
7 Transport and communication	To compare and correlate various modes of transport to the physical regions of India.	<ul> <li>Draw a flow chart to show the means of transportation.</li> <li>Collect information on Metro rail of India and discuss in the classroom.</li> <li>Prepare a concept map showing different means of transportation,</li> </ul>	<ul> <li>At the completion of this unit students will be able to:</li> <li>Develops an understanding about various means of transport being used in different parts of India.</li> <li>Analyse the impact of the physical environment on development of various modes in different regions.</li> </ul>

	transport and communication networks on the development of our nation.	<ul> <li>its advantages and disadvantages.</li> <li>Collect information on Bharatmala and Setubharatam Pariyojana and share it with your peer group.</li> </ul>	<ul> <li>Describe different types of highways found in different parts of our country.</li> <li>Discuss the role of Indian Railways in the growth of India's economy with focus on recent technological advancements.</li> </ul>
			<ul> <li>Describe the five National Waterways of our country.</li> <li>Discuss the role of OIL and Gail in development of gas pipelines in India.</li> </ul>
			<ul> <li>Discuss reasons for the state wise variation in road density in India.</li> <li>Elucidate the impact of modern communication networks in our life.</li> </ul>
			<ul> <li>Mark and label the following on an outline political map of India: Terminal stations of north south corridor, East west corridor &amp; golden quadrilateral</li> </ul>
8 International Trade	To familiarise students about the changes that have taken place in India's international trade in terms of volume, composition	Study the graph (11.1) showing India's import and export and comment on India's balance of trade.	At the completion of this unit students will be able to:  • Give reasons for changing pattern of the composition of

	and direction.	Make a list of items that are in	India's import and export.
	and direction.	<ul> <li>Make a list of Items that are in India's import and export basket.</li> <li>Make a list of India's major trading partners and identify these countries on a world map.</li> <li>Name the nearest domestic and international airports from your school.</li> <li>Study fig 11.5 and identify four cities from where maximum number of air routes converge. Discuss the reasons for the samewith your classmates.</li> </ul>	<ul> <li>Discuss the strategies adopted by India to double its share in the international trade.</li> <li>Evaluate the role of seaports as gateways of international trade with examples.</li> <li>Mark and label the major seaports and airports on an outline map of India.</li> <li>Major Sea Ports: Kandla, Mumbai, Marmagao, Kochi, Mangalore, Tuticorin, Chennai, Vishakhapatnam, Paradwip, Haldia</li> <li>International Airports: <ul> <li>Ahmedabad, Mumbai, Bengaluru, Chennai, Kolkata, Guwahati, Delhi, Amritsar,</li> <li>Thiruvananthapuram &amp; Hyderabad.</li> </ul> </li> </ul>
9 Geographical Perspective on selected issues	To explain the causes and consequences of different types of pollution in India and suggest the measures to control it.	<ul> <li>List the major sources of water pollution, air pollution, noise pollution and land pollution.</li> <li>Identify the most polluted stretch of river Ganga and river Yamuna</li> </ul>	<ul> <li>At the completion of this topic the students will be able to:</li> <li>Classify types of pollution based on the medium through which pollutants are transported and</li> </ul>
		<ul><li>on an outline map.</li><li>Look into the dustbin in your</li></ul>	<ul><li>diffused.</li><li>Explain various sources of</li></ul>

- waste generated by students. state of water, air, land and noise pollution in India. • Prepare a poster to create awareness about Namami Gange • Analyse the rural-urban migration Programme. and its role in pollution. Describe the health and social • Speak to a rag picker and try to problems of slum dwellers with find out what he/she does with reference to Dharavi. the waste. Describe the natural and human · Read the case study of a
  - Describe the natural and human causes of land degradation and suggest measures to control land degradation in India.
  - Suggest measures to control different types of pollutions and evaluate the effectiveness of the Swachh Bharat Mission.

Discuss the problems related to urban waste disposal and suggest measures to convert waste into wealth.

 Read the case study of a migrantlabourer (Given in NCERT) and enact his/her life in your classroom.

### **Practical Work in Geography Part II**

Chapter No. and Name	Learning Objectives	Suggested Teaching Learning Process	Learning Outcomes
1 Data its source and compilation	To understand the importance of data and its uses in Geography	Collect Primary and Secondary Sources of data from different sources and exhibit in practical file	<ul> <li>Define data.</li> <li>Differentiate between primary and secondary sources of data.</li> <li>List several sources of data.</li> </ul>
2 Data Processing	<ul> <li>To calculate Measures of Central tendency</li> <li>To Compare Mean, Median and Mode</li> </ul>	Calculate Mean, Median and Mode using direct and indirect method	<ul> <li>Calculate the mean rainfall of your city.</li> <li>List ten Himalayan peaks with their heights and calculate the median height using the data.</li> </ul>
3 Representation of data	To represent data graphically using different techniques	<ul> <li>Construction of Line Graph</li> <li>Bar Graph</li> <li>Poly Graph</li> <li>Line and Bar Graph</li> <li>Multiple Bar Diagram</li> <li>Compound Bar Diagram</li> <li>Pie Diagram</li> <li>Thematic Maps</li> <li>Dot Map</li> <li>Choropleth Map</li> <li>Isopleth Map</li> </ul>	<ul> <li>Construct a line graph to represent the growth rate of Population in India 1901-2011.</li> <li>Construct a polygraph to compare the growth of sex ratio in different states.</li> <li>Construct a line and bar graph to represent the average monthly rainfall and temperature of Delhi.</li> <li>Construct a multiple bar diagram to represent decadal literacy rate, male literacy and female literacy.</li> <li>Draw a pie diagram to show</li> </ul>

		<ul> <li>India's export to major regions of the world 2010-2011.</li> <li>Construct a dot map to show India's Population 2011.</li> <li>Construct a choropleth map to show state wise variation in population density.</li> </ul>
4 Spatial Information Technology	To understand the need to capture data from different sources and integrate them using a computer that is supported by geo-processing tools.	<ul> <li>Explain Spatial Information Technology or GIS.</li> <li>Describe the advantages of GIS over manual methods.</li> <li>Components of GIS</li> <li>Spatial Data formats</li> </ul>
	To learn basic principles of the Spatial Information Technology and its extension to the Spatial Information System, which is more commonly known as Geographical Information System.	<ul> <li>Raster data format</li> <li>Vector data format</li> <li>Spatial Analysis</li> <li>Overlay and Buffer Analysis.</li> </ul>

# Map Items for identification only on outline political map of the World Fundamentals of Human Geography

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	Areas of subsistence gathering (Fig 4.2)
	Major areas of nomadic herding of the world (4.4)
	Major areas of commercial livestock rearing (4.6)
	Major areas of extensive commercial grain faming (4.12)
	Major areas of mixed farming of the World (4.14)
5-Secondary Activities	Nil
6-Tertiary and Quaternary Activities	Nil
7-Transport, Communication and Trade	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
8-International Trade	Nil

# Map Items for locating and labelling on political outline map of India India - People and Economy

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: (a) Rice (b) Wheat (c) Cotton (d) Jute (e) Sugarcane (f) Tea and (g) Coffee
4-Water Resources	Nil
5-Mineral And Energy Resources	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, Jamnager, Barauni
6-Planning and Sustainable Development in Indian Context	Nil
7-Transport and Communication	Nil
8-International Trade	Mark and label the major seaports and airports on an outline map of India.
	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.
9-Geographical Perspective on selected issues and problems	Nil



#### **Guidelines for Internal Assessment/ Geography Practical**

- A practical file must be prepared by students covering all the topics prescribed in the practical syllabus.
- The file should be completely handwritten with a cover page, index page and acknowledgment.
- All statistical diagrams and maps should be drawn neatly with appropriate headings, scale, index etc. Data to draw statistical diagrams can be taken from the NCERT textbook or Census.
- The practical file will be assessed both by the internal and external examiners at the time of CBSE practical examinations.
- A written exam of 25 marks will be conducted based on the above given practical syllabus on the day of the practical exam.
- Viva will be conducted based on practical syllabus only.
- Written Exam 25 Marks
- Practical file- 02 Marks
- Viva- 03 Marks

