## GEOGRAPHY XI-XII (2020-21) (Code No. 029)

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.

#### **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.
- Analyze/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 analyze 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 analyze, evaluate, interpret and apply the acquired knowledge to determine the environmental issues effectively.

#### COURSE STRUCTURE CLASS XI (2020-21)

#### **One Theory Paper**

70Marks 3Hours

Part	Units	Marks
Α	Fundamentals of Physical Geography	35 Marks
	Unit-1: Geography as a discipline	
	Unit-2: The Earth	
	Unit-3: Landforms	
	Unit-4: Climate	30
	Unit-5: Water (Oceans)	
	Unit-6: Life on the Earth	
	Map and diagram	5
В	India-Physical Environment	35 Marks
	Unit-1: Introduction	
	Unit-2: Physiography	
	Unit-3: Climate, vegetation and soil	
	Map and Diagram	5
	Total	70 Marks
С	Practical Work in Geography Part I	30 Marks
	Unit-1: Fundamentals of Maps	15 Marks
	Unit-2: Topographic and Weather Maps	10 Marks
	Practical Record Book and Viva	5 Marks

Part A:	Fundamentals of Physical Geography		
Unit 1:	Geography as a Discipline		
	<ul> <li>Geography as an integrating discipline, as a science of spatial attributes</li> </ul>		
	Branches of Geography: Physical Geography and Human Geography		
	<ul> <li>Scope and Career Options (Non-evaluative)</li> </ul>		
Unit 2:	The Earth		
01111 2.	Interior of the earth		
	Wegener's continental drift theory and plate tectonics		
	<ul> <li>Earthquakes and volcanoes: causes, types and effects</li> </ul>		
Unit 3:	Landforms		
	Rocks: major types of rocks and their characteristics		
	<ul> <li>Geomorphic processes: weathering; mass wasting; erosion and deposition; soil-formation</li> </ul>		
Unit 4:	Climate		
	<ul> <li>Atmosphere- composition and structure; elements of weather and climate</li> </ul>		
	Insolation-angle of incidence and distribution; heat budget of the earth-heating and cooling of atmosphere (conduction, convection, terrestrial radiation and advection); temperature- factors controlling temperature; distribution of temperature-horizontal and vertical; inversion of temperature		
	<ul> <li>Precipitation-evaporation; condensation-dew, frost, fog, mist and cloud; rainfall-types and world distribution</li> </ul>		
Unit 5:	Water (Oceans)		
	Movements of ocean water-waves, tides and currents.		

#### COURSE CONTENT

	Life on the Earth		
Unit 6:			
	<ul> <li>Biosphere - importance of plants and other organisms; biodiversity and conservation; ecosystem and ecological balance</li> </ul>		
•	on identification of features based on 1 to 6 units on the outline olitical map of the world.		
Part B:	India-Physical Environment		
Unit 1:	Introduction		
	Location, space relations, India's place in the world		
Unit 2:	Physiography		
	<ul> <li>Drainage systems: Concept of river basins, watershed; the Himalayan and the Peninsular rivers</li> </ul>		
Unit 3:	Climate, Vegetation and Soil		
	<ul> <li>Natural vegetation-forest types and distribution; wild life; conservation; biosphere reserves</li> </ul>		
	<ul> <li>Soils - major types (ICAR's classification) and their distribution, soil degradation and conservation</li> </ul>		
	of features based on above units for locating and labeling on the litical/Physical map of India		
Part C:	Practical Work in Geography Part I		
Unit 1:	Fundamentals of Maps		
	<ul> <li>Geo spatial data, Concept of Geographical data matrix; Point, line, area data</li> </ul>		
	<ul> <li>Maps -types; scales-types; construction of simple linear scale, measuring distance; finding direction and use of symbols</li> </ul>		

Unit 2:	Topographic and Weather Maps				
	<ul> <li>Aerial Photographs: Types and Geometry-vertical aerial photographs; difference between maps and aerial photographs; photo scale determination. Identification of physical and cultural features</li> </ul>				
	<ul> <li>Satellite imageries, stages in remote sensing data-acquisition, platform and sensors and data products, (photographic and digital)</li> </ul>				
	<ul> <li>Use of weather instruments: thermometer, wet and dry-bulb thermometer, barometer, wind vane, rain gauge</li> </ul>				
	Practical Record Book and Viva Voce Viva to be based on Practical Unit I and II only.				

### COURSE STRUCTURE Class XII (2020-21)

## One Theory Paper

#### 3Hours 70 Marks

Part	Units	Marks
Α	Fundamentals of Human Geography	35 Marks
	Unit 1: Human Geography	
	Unit 2: People	
	Unit 3: Human Activities 30	
	Unit 4: Human settlements	
	Map Work	5
В	India: People and Economy	35 Marks
	Unit 1: People	
	Unit 2: Human Settlements	
	Unit 3: Resources and Development 30	
	Unit 5: Geographical Perspective on selected issues and problems	
	Map Work	5
	Total	70 Marks
С	Practical Work in Geography Part II	30 Marks
	Unit 1: Processing of Data and Thematic Mapping	25
	Practical Record Book and Viva Voce	5

#### **COURSE CONTENT**

Part A:	Fundamentals of Human Geography		
Unit 1:	Human Geography: Nature and Scope		
Unit 2:	<ul> <li>People</li> <li>Population-distribution, density and growth</li> <li>Population change-spatial patterns and structure; determinants of population change</li> <li>Population Composition - age-sex pyramid; rural-urban composition</li> <li>Human development - concept; selected indicators, international comparisons</li> </ul>		

Unit				
	Human Activities			
3:	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			
	<ul> <li>Tertiary activities-concept; trade, transport and tourism; services; people engaged in tertiary activities - some examples from selected countries</li> </ul>			
	<ul> <li>Quaternary activities-concept; people engaged in quaternary activities</li> <li>- case study from selected countries</li> </ul>			
Unit	Human Settlements			
4:	<ul> <li>Settlement types - rural and urban; morphology of cities (case study); distribution of mega cities; problems of human settlements in developing countries</li> </ul>			
	ork on identification of features based on 1-5 units on the outline al/Political map of World.			
Physica Part B: Unit	al/Political map of World.			
Physica Part B:	al/Political map of World. India: People and Economy			
Physica Part B: Unit	India: People and Economy         People       Population: distribution, density and growth; composition of population - linguistic, religious; sex, rural-urban and occupational-			

• Population, environment and development

#### Unit Human Settlements

- **2:** Rural settlements types and distribution
  - Urban settlements types, distribution and functional classification

# Unit Resources and Development 3:

 Water resources-availability and utilization-irrigation, domestic, industrial and other uses; scarcity of water and conservation methods-rain water harvesting and watershed management

	<ul> <li>Mineral and energy resources- distribution of metallic (Iron ore, Copper, Bauxite, Manganese); non-metallic (Mica, Salt) minerals; conventional (Coal, Petroleum, Natural gas and Hydroelectricity) and non-conventional energy sources (solar, wind, biogas) and conservation</li> <li>Planning in India- target group area planning (case study); idea of sustainable development (case study)</li> </ul>	
Unit 5:	Geographical Perspective on selected issues and problems	
5:	<ul> <li>Environmental pollution; urban-waste disposal</li> </ul>	
	<ul> <li>Urbanization, rural-urban migration; problems of slums</li> </ul>	
	Land degradation	
Map work on locating and labeling of features based on above units on outline map of India.		
Part C:	Practical Work in Geography Part II	
Unit	Processing of Data and Thematic Mapping	
1:	Type and Sources of data: Primary, Secondary and other sources	

- Tabulating and processing of data; calculation of averages, measures of central tendency
- Representation of data- construction of diagrams: bars, circles and flowchart; thematic maps; construction of dot; choropleth and isopleths maps
- Data analysis and generation of diagrams, graphs and other visual diagrams using computers

#### **Prescribed Books:**

- 1. Fundamentals of Physical Geography, Class XI, Published byNCERT
- 2. India, Physical Environment, Class XI, Published byNCERT
- 3. Practical Work in Geography Part I, Class XI, Published by NCERT
- 4. Fundamentals of Human Geography, Class XII, Published byNCERT
- 5. India People and Economy, Class XII, Published byNCERT
- 6. Practical Work in Geography Part II, Class XII, Published by NCERT

Note: The above textbooks are also available in Hindi medium.

## QUESTION PAPER DESIGN GEOGRAPHY THEORY CLASS XI & XII

COMPETENCIES	Total Marks and %
	70 Marks
DEMONSTRATE	29marks- 41%
APPLICATION	26marks - 37%
FORMULATE	15marks - 22%
TOTAL	70marks - 100%

#### Fundamentals of Human Geography Class XII - Textbook I (NCERT) Map Items for identification only on outline political map of the World.

Unit-1	Ch1	Nil	
Unit-2	Ch. 2 to 4	1	The largest country in each continent in terms of area
Unit-3	Ch. 5 to 7	1	Areas of subsistence gathering
	Primary Activities	2	Major areas of nomadic herding of the world
		3	Major areas of commercial livestock rearing
		4	Major areas of extensive commercial grain faming
		5	Major areas of mixed farming of the World
Unit - 5	Ch. 10		Mega cities of the world – Tokyo, Delhi, Shanghai, Mumbai, Sao Paulo

#### India - People and Economy Class XII-Textbook II (NCERT)

#### Map Items for locating and labeling only on the outline political map of India

Units - 1 & 2	Ch. 1 to 4	<ul> <li>State with highest level of urbanization and lowest level of urbanization</li> </ul>
		One state with highest level of HDI & One lowest level of HDI
		<ul> <li>State with highest level of population density &amp; one state with lowest level of population density (2011)</li> </ul>
		<ul> <li>Any city with more than 10 million population – Greater Mumbai, Delhi, Kolkata, Chennai, Bengaluru</li> </ul>
Unit - 3	Ch. 5 to 9	Leading producing states of the following crops:
		(a) Rice (b) Wheat (c) Cotton (d) Jute (e) Sugarcane (f) Tea and (g)
		Coffee
		Mines:
		<ul> <li>Iron-ore mines: Mayurbhanj, Bailadila, Ratnagiri, Bellary</li> </ul>
		<ul> <li>Manganese mines: Balaghat, Shimoga</li> </ul>
		<ul> <li>Copper mines: Hazaribagh, Singhbhum, Khetari</li> </ul>
		<ul> <li>Bauxite mines: Katni, Bilaspur and Koraput</li> </ul>
		<ul> <li>Coal mines: Jharia, Bokaro, Raniganj, Neyveli</li> </ul>
		<ul> <li>Oil Refineries: Mathura, Jamnager, Barauni</li> </ul>