

## 23. GEOGRAPHY (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 rigours 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 :

- Describe locations.
- List/describe what students might see, hear, 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 the spatial pattern of something on a map.
- Familiarise with key concepts, terminology and core principles of Geography.
- 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 utilise 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.

**GEOGRAPHY (029)  
CLASS XI (2013-14)**

**One Theory Paper** **70 Marks**  
**3 Hours**

<b>Part A. Fundamentals of Physical Geography</b>	<b>30 (Marks)</b>
Unit-1: Geography as a discipline	
Unit-2: The Earth	
Unit-3: Landforms	
Unit-4: Climate	
Unit-5: Water (Oceans)	
Unit-6: Life on the Earth	
Unit-7: Map and diagram	<b>5 (Marks)</b>
<b>Part B. India-Physical Environment</b>	<b>30 (Marks)</b>
Unit-8: Introduction	
Unit-9: Physiography	
Unit-10: Climate, vegetation and soil	
Unit-11: Natural hazards and Disasters	
Unit-12: Map and Diagram	<b>5 (Marks)</b>
<b>Part C. Practical Work</b>	<b>30 (Marks)</b>
Unit-1: Fundamentals of Maps	10
Unit-2: Topographic and Weather Maps	15
Unit-3: Practical Record Book and Viva	5

**Note:** The question paper will include a section on **Open Case Studies** based-questions on two case studies, one from Part A and one from Part B of 7 marks each, a total of 14 marks. The case studies will be supplied to students in advance. These case studies are designed to test the analytical and higher order thinking skills of students.

**Part A: Fundamentals of Physical Geography** **90 Periods**

**Unit-1: Geography as a Discipline** **05 Periods**

- Geography as an integrating discipline, as a science of spatial attributes.
- Branches of Geography; Physical Geography and Human Geography.
- Scope and Career Options

**Unit-2: The Earth** **12 Periods**

- Origin and evolution of the earth; Interior of the earth.
- Wegener's continental drift theory and plate tectonics.
- Earthquakes and volcanoes: causes, types and effects.

**Unit-3: Landforms** **20 Periods**

- Rocks: major types of rocks and their characteristics.
- Landforms and their evolution.
- Geomorphic processes: weathering, mass wasting, erosion and deposition; soil-formation.

**Unit 4: Climate** **30 Periods**

- Atmosphere- composition and structure; elements of weather and climate.
- 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.
- Pressure-pressure belts; winds-planetary, seasonal and local; air masses and fronts; tropical and extratropical cyclones.
- Precipitation-evaporation; condensation-dew, frost, fog, mist and cloud; rainfall-types and world distribution.
- World climates-classification (Koeppen and Thornthwaite), Global warming and climatic changes.
- Climate and Global Concerns.

**Unit 5: Hydrosphere** **10 Periods**

- Basics of Oceanography
- Oceans - distribution of temperature and salinity.
- Movements of ocean water-waves, tides and currents; submarine reliefs.
- Ocean resources and pollution.

**Unit 6: Biosphere** **08 Periods**

- Biosphere - importance of plants and other organisms; biodiversity and conservation; ecosystem and ecological balance.

**Unit 7: Map work on identification of features based on 1 to 6 units on the outline/  
Physical/Political map of the world.** **05 Periods**

**Part - B India - Physical Environment** **80 Periods**

**Unit 8: Introduction** **05 Periods**

- Location, space relations, India's place in the world.

**Unit 9: Physiography** **28 Periods**

- Structure and Relief; Physiographic Divisions.
- Drainage systems: Concept of river basins, Watershed; the Himalayan and the Peninsular rivers.

**Unit 10: Climate, Vegetation and Soil** **28 Periods**

- Weather and climate - spatial and temporal distribution of temperature, pressure winds and rainfall, Indian monsoon: mechanism, onset and withdrawal, variability of rainfalls : spatial and temporal; Climatic types (Koeppen).

- Natural vegetation-forest types and distribution; wild life; conservation; biosphere reserves.
- Soils - major types (ICAR's classification) and their distribution, soil degradation and conservation.

**Unit 11: Hazards and Disasters: Causes, Consequences and Management (One case study to be introduced for each topic) 15 Periods**

- Floods, Cloudbursts
- Droughts: types and impact
- Earthquakes and Tsunami
- Cyclones: features and impact
- Landslides

**Unit 12: Map Work of features based on above units for locating and labelling on the Outline/Political/Physical map of India. 04 Periods**

**Part - C. Practical Work 50 Periods**

**Unit 1: Fundamentals of Maps 20 Periods**

- Maps -types; scales-types; construction of simple linear scale, measuring distance; finding direction and use of symbols.
- Latitude, longitude and time.
- Map projection- typology, construction and properties of projection : Conical with one standard parallel and Mercator's projection.

**Unit 2: Topographic and Weather Maps 30 Periods**

- Study of topographic maps (1 : 50,000 or 1 : 25,000 Survey of India maps); contour cross section and identification of landforms-slopes, hills, valleys, waterfall, cliffs; distribution of settlements.
- Aerial Photographs:Types and Geometry-vertical aerial photographs; difference between maps and aerial photographs; photo scale determination.
- Satellite imageries, stages in remote sensing data-acquisition, platform and sensors and data products, (photographic and digital).
- Identification of physical and cultural features from aerial photographs and satellite imageries.
- Use of weather instruments: thermometer, wet and dry-bulb thermometer, barometer, wind vane, rain gauge.
- Use of weather charts: describing pressure, wind and rainfall distribution.

**Unit 3: Practical Record Book and Viva Voce**

Viva to be based on Practical Unit I and II only.

QUESTION PAPER DESIGN 2013-14								
GEOGRAPHY (Theory)			Code No.029				CLASS-XI	
Time: 3 Hours			Max. Marks: 70					
S. No.	Typology of Questions	Learning Outcomes & Testing Skills	Short Answer (1 Mark)	Short Answer - (3 Marks)	Long Answer I (5 Marks)	Map Skills based (5 Marks)	Marks	%
1	<b>Remembering- (Knowledge based)</b> Simple recall questions, to know specific facts, terms, concepts, principles, or theories; Identify, define, or recite, information), <i>Map skill based questions (Identification, location)</i>	<ul style="list-style-type: none"> <li>Reasoning</li> <li>Analytical Skills</li> <li>Critical thinking</li> </ul>	3	1	1	1 (identify location)	16	23%
2	<b>Understanding- (Comprehension -</b> to be familiar with meaning and to understand conceptually, interpret, compare, contrast, explain, paraphrase information)		1	1	2	-	14	20%
3	<b>Application</b> (Use abstract information in concrete situation, to apply knowledge to new situations; Use given content to interpret a situation, provide an example, or solve a problem)		-	1	2	-	13	19%
5	<b>High Order Thinking Skills (Analysis &amp; Synthesis-</b> Classify, compare, contrast, or differentiate between different pieces of information; Organize and/or integrate unique pieces of information from a variety of sources) (includes Map interpretation)		2	1	2	1 (Map interpretation)	20	28%
6.	<b>Evaluation and Multi-Disciplinary-</b> (Appraise, judge, and/or justify the value or worth of a decision or outcome, or to predict outcomes based on values)		1	1+1 (values based)	-	-	7	10%
<b>Total</b>			7×1 =7	6×3=18	7×5=35	2×5=10	70 (22) Practical 30	100%
<b>Time Estimated</b>			15 min.	60 min.	70 min.	20 min.	165+15 = 180 min	

**Note:** No Chapterwise weightage, care to be taken to cover chapters in both books.

The question paper will include a section on **Open Case Studies** based-questions on two case studies, one from Part A and one from Part B of 7 marks each, a total of 14 marks. The case studies will be supplied to students in advance. These case studies are designed to test the analytical and higher order thinking skills of students.

**GEOGRAPHY, CODE-029**  
**CLASS - XI (2013-14)**

**1. Theory -One Paper**

**Time: 3 hours**

**Marks : 70**

<b>Part-I</b>	<b>Fundamentals of Physical Geography</b>	<b>35</b>
	Unit-1: Geography as a discipline	30
	Unit-2: The Earth	
	Unit -3: Landforms	
	Unit - 4: Climate	
	Unit - 5: Water (Oceans)	
	Unit - 6 : Life on the Earth	
	Unit - 7 : Map Work	
<b>Part -II</b>	<b>India- Physical Environment</b>	<b>35</b>
	Unit - 8 : Introduction	30
	Unit - 9 : Physiography	5
	Unit - 10: Climate, vegetation and soil	
	Unit -11 : Natural hazards and Disasters	
	Unit -12 : Map Work	
<b>Total</b>		<b>70</b>
<p><b>Value Based Question from any unit 1-6 (Part- I), 8-11(Part-II) - 3 Marks</b></p> <p><i>Note: - One Value Based Question can be taken from any unit 1-6 (Part -I), 8-11 (Part-II). Accordingly the weightage of the lessons can be reduced as per the discretion of the teacher.</i></p> <p>The question paper will include a section on <b>Open Case Studies</b> based-questions on two case studies, one from Part A and one from Part B of 7 marks each, a total of 14 marks. The case studies will be supplied to students in advance. These case studies are designed to test the analytical and higher order thinking skills of students.</p>		
<b>Part -III Practical Work</b>		<b>30 Marks</b>
Unit -1 : Fundamentals of Maps		10
Unit - 2 : Topographic and Weather Maps		15
Unit - 3 : Practical Record Book and Viva		05

**2. Weightage to Difficulty Level**

Estimated Difficulty Level	Percentage
(i) Easy (E)	20%
(ii) Average (AV)	60%
(iii) Difficult (D)	20%