

GEOGRAPHY (Code No. 029)

(2018-19)

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:

- Familiarise with key concepts, terminology and core principles of Geography.
- Describe locations and correlate with Geographical Perspectives.
- 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 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 analyses 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 (2018-19)

One Theory Paper

70 Marks
3 Hours

Part A	Fundamentals of Physical Geography	35 Marks
	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	
	Map and diagram	5
Part B	India-Physical Environment	35 Marks
	Unit-7: Introduction	30
	Unit-8: Physiography	
	Unit-9: Climate, vegetation and soil	
	Unit-10: Natural hazards and Disasters	
	Map and Diagram	5
Part C	Practical Work	30 Marks
	Unit-1: Fundamentals of Maps	10 Marks
	Unit-2: Topographic and Weather Maps	15 Marks
	Practical Record Book and Viva	5 Marks

Part A: Fundamentals of Physical Geography

87 Periods

Unit-1: Geography as a Discipline

04 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

11 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.

- Geomorphic processes: weathering, mass wasting, erosion and deposition; soil-formation.
- Landforms and their evolution- **Brief erosional and depositional features**

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.
- Climate and Global Concerns.

Unit 5: Water (Oceans) **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: Life on the Earth **07 Periods**

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

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 **78 Periods**

Unit-7: Introduction **04 Periods**

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

Unit-8: Physiography **28 Periods**

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

Unit-9: 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; use of weather charts.
- 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-10: Hazards and Disasters: Causes, Consequences and Management

14 Periods

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

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

- Geo spatial data, Concept of Geographical data matrix; Point, line, area data.
- Maps -types; scales-types; construction of simple linear scale, measuring distance; finding direction and use of symbols.
- Map projection- Latitude, longitude and time, typology, construction and properties of projection: Conical with one standard parallel and Mercator's projection. (only two projections)

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. Identification of physical and cultural features.
- Satellite imageries, stages in remote sensing data-acquisition, platform and sensors and data products, (photographic and digital).
- Use of weather instruments: thermometer, wet and dry-bulb thermometer, barometer, wind vane, rain gauge.

Practical Record Book and Viva Voce

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