Geography Class 11 Syllabus

Course Structure

Part/Unit	Topic or Chapter	Marks
Part A	**Fundamentals of Physical Geography**	**25**
Unit-1	Geography as a discipline	
Unit-2	The Earth	
Unit-3	Landforms	
Unit-4	Climate	
Unit-5	Water (Oceans) - OTBA	
Unit-6	Life on the Earth	
	Map abd Diagram	5
Part B	**India - Physical Environment**	**25**
Unit-7	Introduction	
Unit-8	Physiography	
Unit-9	Climate, vegetation and soil	
Unit-10	Natural hazards and Disasters	
	Map and Diagram	5
Part C	**Practical Work**	**30**
Unit-1	Fundamentals of Maps	10
Unit-2	Topographic and Weather Maps	15
	Practical Record Book and Viva	5

Part A: Fundamentals of Physical Geography

Unit-1: Geography as a Discipline

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

Unit-2: The Earth

- 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

- 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

- 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

- 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

- 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.

Part - B: India - Physical Environment

Unit-7: Introduction

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

Unit-8: Physiography

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

Unit-9: Climate, Vegetation and Soil

- 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; 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-10: Hazards and Disasters: Causes, Consequences and Management

- 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.

Part - C: Practical Work

Unit-1: Fundamentals of Maps

- Geo spatial data, Concept of Geographicaldata 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

- 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.