COURSE STRUCTURE
CLASS XI(2020-21)

One Theory Paper **70Marks**
3Hours

Part	Units	No. of Periods	Marks
A	**Fundamentals of Physical Geography**	**87**	**35 Marks**
	Unit-1: Geography as a discipline	06	**30**
	Unit-2: The Earth	11	
	Unit-3: Landforms	20	
	Unit-4: Climate	30	
	Unit-5: Water (Oceans)	10	
	Unit-6: Life on the Earth	07	
	Map and diagram	05	**5**
B	**India-Physical Environment**	**78**	**35 Marks**
	Unit-7: Introduction	04	**30**
	Unit-8: Physiography	28	
	Unit-9: Climate, vegetation and soil	28	
	Unit-10: Natural hazards and disasters	14	
	Map and Diagram	04	**5**
	Total	**165**	**70 Marks**
C	**Practical Work in Geography Part I**	**50**	**30 Marks**
	Unit-1: Fundamentals of Maps	20	**10 Marks**
	Unit-2: Topographic and Weather Maps	30	**15 Marks**
	Practical Record Book and Viva		**5 Marks**

COURSE CONTENT

Part A:	Fundamentals of Physical Geography	87Periods
Unit 1:	**Geography as a Discipline** • Geography as an integrating discipline, as a science of spatial attributes • Branches of Geography: Physical Geography and Human Geography • Scope and Career Options (Non-evaluative)	06Periods
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	11Periods
Unit 3:	**Landforms** • 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	20 Periods
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 extra tropical cyclones • Precipitation-evaporation; condensation-dew, frost, fog,	30 Periods

	mist and cloud; rainfall-types and world distribution • Climate and Global Concerns	
Unit 5:	**Water (Oceans)** Basics of Oceanography Oceans - distribution of temperature and salinity • Movements of ocean water-waves, tides and currents; submarine reliefs • Ocean resources and pollution	**10 Periods**
Unit 6:	**Life on the Earth** • Biosphere - importance of plants and other organisms; biodiversity and conservation; ecosystem and ecological balance	**07 Periods**
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** • Location, space relations, India's place in the world	**04 Periods**
Unit 8:	**Physiography** • Structure and Relief; Physiographic Divisions • Drainage systems: Concept of river basins, watershed; the Himalayan and the Peninsular rivers	**28 Periods**
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 • Natural vegetation-forest types and distribution; wild life; conservation; biosphere reserves • Soils - major types (ICAR's classification) and their distribution, soil degradation and conservation	**28 Periods**
Unit 10:	**Hazards and Disasters: Causes, Consequences and Management** • Floods, Cloudbursts • Droughts: types and impact	**14 Periods**

	Earthquakes and Tsunami Cyclones: features and impact Landslides	
Map Work of features based on above units for locating and labeling on the outline Political/Physical map of India		**04 Periods**
Part C:	**Practical Work in Geography Part I**	**50 Periods**
Unit 1:	**Fundamentals of Maps** • 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)	**20 Periods**
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	**30 Periods**
	Practical Record Book and Viva Voce **Viva to be based on Practical Unit I and II only.**	