### 2022-23 GEOGRAPHY(111)

70 Marks

#### Class XI 3 Hours

**One Theory Paper** Part A. Fundamentals of Physical Geography 35 (Marks) Unit-1: Geography as a discipline 03 Unit-2: The Earth 05 Unit-3: Landforms 08 Unit-4: Climate 10 Unit-5: Water (Oceans) 04 Unit-6: Life on the Earth 03 02 Unit-7: Map work Part B. India-Physical Environment 35 (Marks) Unit-8: Introduction 03 Unit-9: Physiography 10 Unit-10: Climate, vegetation and soil 10 Unit-11: Natural hazards and Disasters 09 Unit-12: Map Work 03 Part C. Practical Work 30 (Marks)

### Part A: Fundamentals of Physical Geography

#### Unit-1: Geography as a Discipline

Geography as an integrating discipline, as a scienceof spatial attributes; Branches of geography; importance of physical geography

#### 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.

#### Unit-3: Landforms

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

#### 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); temperaturefactors 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), greenhouse effect, global warming and climatic changes.	
Unit 5:	Water (Oceans)		
		Hydrological Cycle.	
		Oceans - distribution of temperature and salinity; movements of ocean water waves, tides and currents; submarine reliefs.	
Unit 6:	Life on the Earth		
		Biosphere - importance of plants and other organisms; biodiversity and conservation; ecosystem and ecological balance.	
Unit 7:	Map work on identification of features based on the above units on the outline political map of the world.		
Part B.	India - Physical Environment		
Unit 8:	Introduction		
		Location-space relations and India's place in the world.	
Unit 9:	Phys	siography	
		Structure and Relief;	
		Drainage systems: concept of watershed; the Himalayan and the Peninsular;	
		Physiographic divisions.	
<b>Unit 10:</b>	Clim	nate, 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; 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.	
<b>Unit 11:</b>	Natural Hazards and Disasters: Causes, Consequences and Management (One case study to be introduced for each topic)		
		Floods and droughts	
		Earthquakes and Tsunami	
		Cyclones	
		Landslides	

# Unit 12: Map Work of features based on above units for locating and labelling on the Outline Political map of India.

#### C. Practical Work

#### **Unit 1:** Fundamentals of Maps

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 projections: Conical with one standard parallel and Mercator's projection.

### **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 & Geometry-vertical aerial photographs; difference between maps & aerial photographs; photo scale determination.
Satellite imageries, stages in remote sensing data-acquisition, platform & sensors and data products, (photographic & digital).
Identification of physical & cultural features from aerial photographs & satellite imageries.

Use of weather instruments: thermometer, wet and dry-bulb thermometer, barometer, wind vane, raingauge.

Use of weather charts: describing pressure, wind and rainfall distribution.

#### **Unit 3: Practical Record Book and Vivavoce**

#### **Unit 4: Continuous Assessment (Unit Test)**

#### **CLASS XIth PRACTICAL MARKING SCHEME**

S. No.	Topic	Marks
1	Fundamentals of Maps	10
2	Topographic Maps	5
3	Viva	5
4	Practical record and Model Chart	5
5	Continuous Assessment (Unit Test)	5
	Total	30

## 2022-23

## GEOGRAPHY(111) CLASS XII

Time: 3 Hours

One Theory Paper	<b>Marks</b> : 70		
A. Fundamentals of Human Geography	35 Marks		
Unit 1: Human Geography	3		
Unit 2: People	5		
Unit 3: Human Activities	10		
Unit 4: Transport, Communication & Trade	10		
Unit 5: Human settlements	5		
Unit 6: Map Work	2		
B. India: People and Economy	35 Marks		
Unit 7: People	5		
Unit 8: Human Settlements	4		
Unit 9: Resources and Development	12		
Unit 10: Transport, Communication and International Trade	7		
Unit 11: Geographical Perspective on selected issues and problems	4		
Unit 12: Map Work	3		
C. Practical Work	30 Marks		
<ul> <li>□ Population — distribution, density and growth</li> <li>□ Population change-spatial patterns and structure; determinants of population change;</li> <li>□ Age-sex ratio; rural-urban composition;</li> <li>□ Human development - concept; selected indicators, international comparisons</li> </ul>			
Unit 3: Human Activities			
□ 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>Secondary activities-concept; manufacturing: types – household, small scale, large scale; agro based and mineral based industries; people engaged in secondary activities – some examples from selected countries.</li> </ul>			
<ul> <li>Tertiary activities-concept; trade, transport and communication; services tertiary activities - some examples from selected countries</li> </ul>	s; people engaged in		
<ul> <li>Quaternary activities-concept; knowledge based industries; people engage activities - some examples from selected countries</li> </ul>	ged in quaternary		
Unit 4: Transport, Communication and Trade			
☐ Land transport - roads, railways; trans-continental railways.			
☐ Water transport- inland waterways; major ocean routes.			
☐ Air transport- Intercontinental air routes.			
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	International trade-Bases and changing patterns; ports as gateways of international trade, role of WTO in International trade.
Unit	5: Human Settlements
	Settlement types - rural and urban; morphology of cities (case study); distribution of mega cities; problems of human settlements in developing countries.
Unit	6: Map Work on identification of features based on above units on the outline Political map of World.
Part	B. India: People and Economy
Unit	7: People
	Population: distribution, density and growth; composition of population - linguistic, religious; sex, rural-urban and occupational—polulation change through time and regional variations;
	Migration: international, national-causes and consequences;
	Human development: selected indicators and regional patterns;
	Population, environment and development.
Unit	8: Human Settlements
	Rural settlements - types and distribution;
	Urban settlements - types, distribution and functional classification.
Unit	9: Resources and Development
	Land resources- general land use; agricultural land use, Distribution of major crops (Wheat, Rice, Tea, Coffee, Cotton, Jute, Sugar cane and Rubber), agricultural development and problems.
	Water resources-availability and utilization-irrigation, domestic, industrial and other uses; scarcity of water and conservation methods-rain water harvesting and watershed management (one case study related with participatory watershed management to be introduced).
	Mineral and energy resources: distribution of metallic (Ironore, Copper, Bauxite, Manganese) non-metallic (Mica, Salt) minerals; conventional (Coal, Petroleum, Natural gas and Hydro electricity) and non-conventional energy sources (solar, wind, biogas).
	Industries - types, industrial location and clustering; distribution and changing pattern of selected industries-iron and steel, cotton textiles, sugar, petrochemicals, and knowledge based industries; impact of liberalization, privatisation and globalisation on industrial location;
	Planning in India- target area planning (case study); idea of sustainable development (case study)
Unit	10: Transport, Communication and International Trade
	Transport and communication-roads, railways, waterways and airways: oil and gas pipelines; national electric grids; communication networkings - radio, television, satellite and internet;
	International trade- changing pattern of India's foreign trade; sea ports and their hinterland and airports,
Unit	11: Geographical Perspective on Selected Issues and Problems (One case study to be introduced for each topic)
	Environmental pollution; urban-waste disposal.
	Urbanisation rural-urban migration; problem of slum.  Land Degradation.

# Unit 12: Map work on locating and labelling of features based on above units on outline political map of India

#### C. Practical Work

☐ Sources of data.

## **Unit I: Processing of Data and Thematic Mapping**

Tabulating and processing of data; calculation of averages, measures of central tendency, deviation and rank correlation;
Representation of data- construction of diagrams: bars, circles and flowchart; thematic maps; construction of dot; choropleth and isopleth maps.

☐ Use of computers in data processing and mapping.

# **Unit II: Survey (Chain Table Survey and Plane Table Survey) Unit III: Field Study or Spatial Information Technology**

Field visit and study: map orientation, observation and preparation of sketch; survey on any one of the local concerns; pollution, ground water changes, land use and land-use changes, poverty, energy issues, soil degradation, impact of floods and drought, catchment area of school, Market survey and Household survey (any one topic of local concern may be taken up for the study; observation and questionnaire survey may be adopted for the data collection; collected data may be tabulated and analysed with diagrams and maps).

OR

#### **Spatial Information Technology**

Introduction to GIS; hardware requirements and software modules; data formats; raster and vector data, data input, editing & topology building; data analysis; overlay & buffer

**Unit 4: Continuous Assessment** 

## Marking Scheme of Geography Practical Work Class XII

S. No.	Topic	Internal Examiner	External Examiner
1	Surveying (Chain and Tape Survey ,Plane Table Survey)	5	
2	Processing of data and Thematic Mapping		10
3	Viva		5
4	Practical record and Model Chart	5	
5	Continuous Assessment(Unit Test)	5	
	Total	15	15