

GEOGRAPHY (029)

CLASS XI (2015-16)

One Theory Paper

70 Marks
3 - 3½ Hours

Part A	Fundamentals of Physical Geography	30 Marks
	Unit-1: Geography as a discipline	25
	Unit-2: The Earth	
	Unit-3: Landforms	
	Unit-4: Climate	
	Unit-5: Water (Oceans) (OTBA)	
	Unit-6: Life on the Earth	
	Map and diagram	5
Part B	India-Physical Environment	30 Marks
	Unit-7: Introduction	25
	Unit-8: Physiography	
	Unit-9: Climate, vegetation and soil	
	Unit-10: Natural hazards and Disasters	
	Map and Diagram	5
	Note: The question paper will include a section on Open Text-based Assessment of 10 marks from Unit - 5 (Part A). No other question will be asked from this unit. The open text material on this unit will be supplied to students in advance. These materials are designed to test the analytical and higher order thinking skills of students. The OTBA will be asked in the final examination to be held in March 2016.	10
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.

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, Differences in parameter between koeppen & Thornthwaite, Global warming and climatic changes.
- Climate and Global Concerns.

Unit 5: Hydrosphere (OTBA)

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

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; 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

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

Open Text based Assessment

05 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.

GEOGRAPHY (Code No. 029)

CLASS - XI (2015-16)

1. Theory - One Paper

Time: 3½ - 3 hours

Marks: 70

Part-I	Fundamentals of Physical Geography	30
	Unit-1: Geography as a discipline	25
	Unit-2: The Earth	
	Unit -3: Landforms	
	Unit - 4: Climate	
	Unit - 5: Water (Oceans) (OTBA)	
	Unit - 6 : Life on the Earth	
	Map Work & Diagram	05
Part-II	India- Physical Environment	30
	Unit - 7 : Introduction	25
	Unit - 8 : Physiography	
	Unit - 9 : Climate, vegetation and soil	
	Unit -10 : Natural hazards and Disasters	
	Map Work & Diagram	05
Part-III	Note: The question paper will include a section on Open Text-based Assessment of 10 marks from Unit - 5 (Part A). No other question will be asked from this unit. The open text material on this unit will be supplied to students in advance. These materials are designed to test the analytical and higher order thinking skills of students. The OTBA will be asked in the final examination to be held in March 2016.	10
Total		70
Value Based Question from any unit 1-6 (Part- I), 7-10 (Part-II) - 3 Marks Note: - One Value Based Question can be taken from any unit 1-6 (Part -I), 7-10 (Part-II). Accordingly the weightage of the lessons can be reduced as per the discretion of the teacher.		
Part -III	Practical Work	30
	Unit -1 : Fundamentals of Maps	10
	Unit - 2 : Topographic and Weather Maps	15
	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%

QUESTION PAPER DESIGN 2015-16								
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	Remembering- (Knowledge based Simple recall questions, to know specific facts, terms, concepts, principles, or theories; Identify, define, or recite, information), Map skill based questions (Identification, location)	<ul style="list-style-type: none"> Reasoning Analytical Skills Critical thinking 	3	1	1	1 (identify location)	16	23%
2	Understanding- (Comprehension -to be familiar with meaning and to understand conceptually, interpret, compare, contrast, explain, paraphrase information)		1	1	2	-	14	20%
3	Application (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%
4	High Order Thinking Skills (Analysis & Synthesis- 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 (OTBA)	1 (Map interpretation)	20	28%
5	Evaluation- (Appraise, judge, and/or justify the value or worth of a decision or outcome, or to predict outcomes based on values)		1	1+ (values based)	-	-	7	10%
Total			7x1 =7	6x3=18	7x5=35	2x5=10	70 (22) Practical 30	100 %
Time Estimated			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 Text-based Assessment** of 10 marks from Unit - 5 (Part A). No other question will be asked from this unit. The open text material on this unit will be supplied to students in advance. These materials are designed to test the analytical and higher order thinking skills of students. The OTBA will be asked in the final examination to be held in March 2016.