

GEOGRAPHY
THEORY
CLASS - XI

Periods : 166

One Paper

3 Hours

Marks : 70

PART :	UNIT	MARKS
A.	FUNDAMENTALS OF PHYSICAL GEOGRAPHY	(30 Marks)
	1. Geography as a Discipline.	3
	2. The Earth.	4
	3. Landforms.	6
	4. Climate.	10
	5. Water (Oceans).	5
B.	6. Life on the Earth.	2
	INDIA : PHYSICAL ENVIRONMENT	(30 Marks)
	7. Introduction.	2
	8. Physiography	10
	9. Climate, Vegetation and Soil.	10
C.	10. Natural Hazards and Disasters : Causes, Consequences and Managements.	8
	MANIPUR : PHYSICAL ENVIRONMENT	(10 Marks)
	11. Introduction and Physiography	5
	12. Climate, Vegetation and Soil.	5

PART-A FUNDAMENTALS OF PHYSICAL GEOGRAPHY (Periods 78)

Unit-1 Geography as a discipline (Periods 5)

- (a) Geography as an integrating discipline, as a science of spatial attributes;
- (b) Branches of Geography; importance of Physical Geography.

Unit-2 The Earth (Periods 10)

- (a) Origin and evolution of the earth; Interior of the earth; Earthquakes and Volcanoes; Wegener's Continental Drift Theory and the theory of plate tectonics.

Unit-3 Landforms (Periods 20)

- (a) Rocks and minerals - major types of rocks and their characteristics.
- (b) Landforms and their evolution.

- (c) Geomorphic processes - Weathering, mass wasting, erosion and deposition; soils -formation, major types.

Unit-4 Climate (Periods 30)

- (a) Atmosphere-Compositions and structure; elements of weather and climate.
- (b) Insolation - angle of incidence and distribution; heat budget of the earth- heating and cooling of atmosphere (conduction, convection, terrestrial, advection); Temperature-factors controlling temperature; distribution of temperature-horizontal and vertical; inversion of temperature.
- (c) Pressure-Pressure belts; winds-planetary, seasonal and local; air masses and fronts; Cyclones-tropical and extra-tropical.
- (d) Precipitation-evaporation; condensation-dew, frost, fog, mist and clouds; rainfall-types and world distribution.
- (e) World climates-classification (Koeppen); greenhouse effect; Global warming and climatic changes.

Unit-5 Water (Oceans) (Periods 8)

- (a) Hydrological Cycle;
- (b) Oceans-submarine relief; distribution of temperature and salinity; movements of ocean water-waves, tides and currents.

Unit-6 Life on the Earth. (Periods 5)

- (a) Biosphere-importance of plants and other organisms; biodiversity and conservation; ecosystems, bio-geo chemical and ecological balance.

PART-B INDIA : PHYSICAL ENVIRONMENT (Periods 68)

Unit-7 Introduction (Periods 4)

- (a) Location-Space relations and India's place in the world.

Unit-8 Physiography (Periods 22)

- (a) Structure and relief;
- (b) Drainage system; concept of water sheds : the Himalayan and the Peninsular;
- (c) Physiographic divisions

Unit-9 Climate, Vegetation and Soil (Periods 22)

- (a) Weather and Climate-spatial and temporal distribution of temperature, pressure, winds and rainfall; Indian monsoons; mechanism, onset and withdrawal, variability-spatial and temporal; climatic types.
- (b) Natural vegetation, forests-types and distribution; wildlife; conservation; biosphere reserves;
- (c) Soils-major types (ICAR's classification) and their distribution, soil degradation and conservation.

Unit-10 Natural Hazards and Disasters : Causes, Consequences and Management. (one case study to be introduced for each topic) (Periods 20)

- (a) Flood and drought
- (b) Earthquake and Tsunami
- (c) Cyclone
- (d) Landslide

PART-C MANIPUR : PHYSICAL ENVIRONMENT (Periods 20)

Unit-11 Introduction and Physiography (Periods 10)

- (a) Location, Size and Extension
- (b) Physiography–Relief and Drainage

Unit-12 Climate, Vegetation and Soils (Periods 10)

- (a) Climate
- (b) Vegetation–types and distributions
- (b) Soils–types and distribution

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GEOGRAPHY

PRACTICAL CLASS - XI

Periods : 54

One Paper

3 Hours

Marks : 30

PART :	UNIT	Marks 30
D.	1. Fundamentals of maps.	15 (6+4+5)
	2. Topographic and Weather maps.	5
	3. Practical Record Book.	5
	4. Viva-Voce	5

PART-D PRACTICAL WORK PERIODS 54

Unit-1 FUNDAMENTALS OF MAPS Periods 22

- (a) Maps–types; Scales–types; construction of linear scales, measuring distance, finding direction and use of symbols; Periods 8
- (b) Latitude, Longitude and time; Periods 4
- (c) Map projection–typology, construction and properties of Cylindrical Equal-Area, conical with one standard parallel and Mercator’s projection. Periods 10

Unit-2 TOPOGRAPHIC AND WEATHER MAPS Periods 32

- (a) Representation of relief; drawing of contour cross sections of the feature represented by contours–slopes, hills, valleys waterfalls, cliffs; study of topographic maps (RF. 1:50,000 or 1:25,000, survey of India maps): identification of physical features–slopes, hills, valleys, waterfall, cliffs etc. and cultural features–distribution of settlements;
- (b) Aerial photographs and Satellite Images.
 - (i) Aerial Photographs : Types and Geometry-Vertical aerial photographs : photo scale determination.
 - (ii) Satellite Images : Stages in remote sensing data acquisition, platform and sensors and data products, (photographic and digital)
- (c) Use of weather instruments : thermometer, wet and dry bulb thermometer, barometer, windvane, rain gauge.
- (d) Use of weather charts : describing pressure, wind and rainfall distribution.

PRESCRIBED TEXTBOOKS :

1. Fundamentals of Physical Geography
(Textbook in Geography for Class XI)
Published by : NCERT, New Delhi.
2. India : Physical Environment
(Textbook in Geography for Class XI)
Published by : NCERT, New Delhi.
3. Manipur : Physical Environment
(Textbook in Geography for Class XI)
By : H. Shyamsunder Singh
Published by : Council of Higher Secondary Education, Manipur
4. Practical Work in Geography Part I
(Textbook for Class XI)
Published by : NCERT, New Delhi.

REFERENCE BOOKS :

1. Geography for Class XI
By : D.R. Khullar
Published by : Saraswati House Pvt. Ltd., New Delhi - 110002
2. Geography for Class XI
By : Yash Pal Singh
Published by : V.K. (India) Enterprises, New Delhi - 2

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DESIGN
QUESTION PAPER/UNIT TEST

Subject : GEOGRAPHY (THEORY)
Class : XI
Time : 3 Hours
Full Marks : 70

I	WEIGHTAGE TO OBJECTIVES :					
	Objectives	K	U	A	S	Total
	Percentage of Marks	35	45	10	10	100
	Marks	25	31	7	7	70
II	WEIGHTAGE TO FORM OF QUESTIONS :					
	Forms of Questions	E	SA-II	SA-I	VSA	Total
	No. of Questions	3	10	10	5	28
	Marks Allotted	15	30	20	5	70
	Estimated Time (in Minutes)	60	60	50	10	180
III	WEIGHTAGE TO CONTENT :					
	Units/Sub-units					Marks
	1.	Geography as a Discipline				3
	2.	The Earth				4
	3.	Landforms				6
	4.	Climate				10
	5.	Water (Oceans)				5
	6.	Life on the Earth				2
	7.	India-Introduction				2
	8.	Physiography				10
	9.	Climate, Vegetation and Soil				10
	10.	Natural Hazards and Disasters : Causes, Consequences and Management				8
	11.	Manipur – Introduction and Physiography				5
12.	Climate, Vegetation and Soil				5	
Total :					70	
IV.	SCHEME OF SECTIONS : Nil					
V.	SCHEME OF OPTIONS: Internal option only in Essay type Questions					
VI.	DIFFICULTY LEVEL :					
	Difficult : 15% marks					
	Average : 50% marks					
	Easy : 35% marks					

Abbreviation : K (Knowledge), U (Understanding), A (Application), S (Skill), E (Essay Type), SA (Short Answer Type), VSA (Very Short Answer Type), O (Objective Type)

DESIGN QUESTION PAPER/UNIT TEST

Subject : GEOGRAPHY (PRACTICAL)
Class : XI
Time : 3 Hours
Full Marks : 30

I	WEIGHTAGE TO OBJECTIVES :					
	Objectives	K	U	A	S	Total
	Percentage of Marks	7	20	13	60	100
	Marks	1	3	2	9	15
II	WEIGHTAGE TO FORM OF QUESTIONS :					
	Forms of Questions	E	SA-II	SA-I	VSA	Total
	No. of Questions	1	2	1	2	6
	Marks Allotted	5	6	2	2	15
	Estimated Time (in Minutes)	60	60	50	10	180
III	WEIGHTAGE TO CONTENT:					
	Units/Sub-units					Marks
	1.	Fundamentals of Maps				15=(6+4+5)
	2.	Topographic and weather maps (To be assessed during viva-voce)				5
	3.	Practical Record Book				5
	4.	Viva-Voce				5
Total :					30	
IV.	SCHEME OF SECTIONS : Nil					
V.	SCHEME OF OPTIONS : Internal options may be provided in Eassy type question					
VI.	DIFFICULTY LEVEL:					
	Difficult : 15% marks					
	Average : 50% marks					
	Easy : 35% marks					

Abbreviation : K (Knowledge), U (Understanding), A (Application),
S (Skill), E (Essay Type), SA (Short Answer Type),
VSA (Very Short Answer Type), O (Objective Type)

GEOGRAPHY THEORY CLASS - XII

Periods : 170

One Paper

3 Hours

Marks : 70

PART :	UNIT	MARKS
A.	FUNDAMENTALS OF HUMAN GEOGRAPHY	(30 Marks)
	1. Human Geography-Nature and Scope	3
	2. People	5
	3. Human Activities	10
	4. Transport, Communication and Trade	9
B.	INDIA : PEOPLE AND ECONOMY	(30 Marks)
	5. Human settlements	3
	6. People	4
	7. Human settlements	3
	8. Resources and Development	11
	9. Transport, Communication and International Trade	7
C.	MANIPUR : PEOPLE AND ECONOMY	(10 Marks)
	10. Geographical perspective on selected issues and problems	5
	11. People and Human Settlement	4
	12. Resources and Development	4
	13. Transport, Communication and Trade	2

PART-A FUNDAMENTALS OF HUMAN GEOGRAPHY (Periods 75)
 Unit-1 Human Geography : Nature and Scope (Periods 4)
 Unit-2 People (Periods 13)
 (a) Population of world–distribution, density and growth;
 (b) Population change–spatial patterns and structure; determinants of population change
 (c) Age–Sex ratio, rural–urban composition;
 (d) Human development–concept; selected indicators, international comparisons
 Unit-3 Human Activities (Periods 28)
 (a) Primary activities–Concept and changing trends; gathering, pastoral, mining, subsistence agriculture, modern agriculture; people engaged in agriculture and allied activities–some examples from selected countries.

- (b) Secondary activities–Concept; manufacture : agro-processing, house hold, small-scale, large-scale; people engaged in secondary activities–Some examples from selected countries;
 - (c) Tertiary activities–Concept; trade, transport and communication; Services, people engaged in tertiary activities some examples from selected countries.
 - (d) Quaternary activities–Concept : knowledge based industries; people engaged in quaternary activities–some examples from selected countries.
- Unit-4 Transport, Communication and Trade (Periods 20)
- (a) Land transport–roads, railways–rail network; trans–continental railways;
 - (b) Water transport–inland waterways; major Ocean routes;
 - (c) Oil and gas pipelines;
 - (d) Satellite Communication and Cyber space.
 - (e) International trade–Basis and changing patterns; ports as gateways of international trade, role of WTO in International trade.
- Unit-5 Human Settlements (Periods 10)
- (a) Settlement types–rural and urban; morphology of cities (case study); distribution of mega cities; problems of human settlements in developing countries.
- PART-B INDIA : PEOPLE AND ECONOMY (Periods 75)
- Unit-6 People (Periods 10)
- (a) Population–distribution, density and growth; composition of population: linguistic and religious; rural–urban population change through time-regional variations; Occupation.
 - (b) Migration : international, national–causes and consequences;
 - (c) Human development–selected indicators and regional patterns;
 - (d) Population, environment and development
- Unit-7 Human Settlements (Periods 8)
- (a) Rural settlements–types and distribution;
 - (b) Urban settlements–types, distribution and functional classification.
- Unit-8 Resources and Development (Periods 30)
- (a) Land resources–general land use; agricultural land use–major crops; agricultural development and problems, common property resources;
 - (b) 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 participator watershed management to be introduced)

- (c) Mineral and energy resources–metallic and non-Metallic minerals and their distribution; conventional and non-conventional energy sources;
 - (d) Industries–types and distribution; industrial location and clustering; changing pattern of selected industries–iron and steel, cotton textiles, sugar, petrochemicals, and knowledge based industries, impact of liberalization, privatization and globalization on industrial location;
 - (e) Planning in India–target area planning (case study); idea of sustainable development (case study).
- Unit-9 Transport, Communication and International Trade (Periods 15)
- (a) Transport and communication–roads, railways, waterways and airways; oil and gas pipelines; national electric grids; Communication networkings–radio, television, satellite and internet;
 - (b) International trade–changing pattern of India’s foreign trade; sea ports and their hinterland, and airports.
- Unit-10 Geographical Perspective on selected Issues and Problems (One case study to be introduced for each topic)
- (a) Environmental pollution; Urban–waste disposal;
 - (b) Urbanisation; rural-urban migration; problem of slums;
 - (c) Land Degradation.
- PART-C MANIPUR : PEOPLE AND ECONOMY (Periods 20)
- Unit-11 People and Human Settlement (Periods 8)
- (a) Population : distribution, density and growth; composition–linguistic and religious; structure–age–sex; participation–workers and non–workers; migration–international, national–causes and consequences.
 - (b) Human settlements : types–rural & urban, distribution pattern and urban functional classification.
- Unit-12 Resources and Development (Periods 7)
- (a) Forest products, conservation of forests for ecological balance;
 - (b) Land resources, water resources, mineral and energy resources;
 - (c) Industries;
- Unit-13 Transport, Communication and Trade: (Periods 5)
- (a) Transport and communication–roads, railways, waterways and airways; Communication networking–radio, television, satellite and internet.
 - (b) International trade; Indo–Myanmar border trade.

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1. Fundamentals of Human Geography
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Published by : NCERT, New Delhi.
2. India : People and Economy
(Textbook in Geography for Class XII)
Published by : NCERT, New Delhi.
3. Manipur : People and Economy
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GEOGRAPHY
PRACTICAL
CLASS - XII

Periods : 166

Marks : 30

One Paper

3 Hours

PART :	UNIT	Marks 30
D.	1. Processing of Data and Thematic Mapping	15
	2. Field Study or spatial Information Technology	5
	3. Practical Record Book.	5
	4. Viva-Voce	5

PART-D PRACTICAL WORK (Periods 50)

Unit-1 Processing of Data and Thematic Mapping (Periods 25)

- (a) Sources of data;
- (b) Tabulating and processing data; calculation of averages, measures of central tendency, deviation and rank correlation;
- (c) Representation of data—construction of diagrams : bars, circles and flowchart, thematic maps.
- (d) Use of computers in data processing and mapping.

Unit-2 Field Study or Spatial Information Technology (Periods 25)

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, drought and flood impacts (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 and topology building; data analysis; overlay and buffer.

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	2.	People				5
	3.	Human Activities				10
	4.	Transport, Communication and Trade				9
	5.	Human Settlements				3
	6.	India-People				4
	7.	Human Settlements				3
	8.	Resources and Development				11
	9.	Transport, Communication and International Trade				7
	10.	Geographical Perspectives on Selected Issues and Problems				5
	11.	Manipur-People and Human Settlement				4
	12.	Resources and Developments				4
13.	Transport, Communication and Trade				2	
					Total :	70
IV.	SCHEME OF SECTIONS : Nil					
V.	SCHEME OF OPTIONS : Internal options only in Essay Type Questions					
VI.	DIFFICULTY LEVEL:					
	Difficult : 15% marks					
	Average : 50% marks					
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	Estimated Time (in Minutes)	60	60	50	10	180
III	WEIGHTAGE TO CONTENT:					
	Units/Sub-units					Marks
	1.	Processing of Data and Thematic Mapping				15
	2.	Field study or Spatial Information Technology				5
	3.	Practical Record Book				5
	4.	Viva-Voce				5
					Total :	30
IV.	SCHEME OF SECTIONS : Nil					
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