

Geography
Class – XI
Fundamentals of Physical Geography
Section – A

Total Periods : 140

Total Marks : 70

| Sr. No. | Periods | Topic | Subject Matter | Geographical Skills |
|----------------|----------------|-----------------------------------|---|--|
| 01 | 03 | Nature and Scope of Geography | Definition, nature, objectives, scope and evolution of geography as a discipline. Branches of Geography and importance of physical geography. | i) Make the model of various continents with the help of material available with you. |
| 02 | 05 | Interior of the Earth | Its evolution, theories regarding the origin of the Earth - Nebular Hypothesis, Wegner's continental drift theory and plate tectonics. | i) Show the various tectonic plates on the map of the world. |
| 03 | 04 | Structure of the Earth's interior | Source of the knowledge of the Earth's interior. Evidence from earthquake waves, Evidence from Meteors. Temperature and | Prepare a model of interior structure of the earth with the help of suitable material and make various layers with the |

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| | | | pressure in the interior of the Earth. Density and structure of the interior of the Earth. | help of colours. - |
| 04 | 04 | Materials of Earth's Crust | Minerals and rocks, types of rocks their characteristics, minerals and rock cycle. | |
| 05 | 04 | Earthquakes and Volcanoes | Definition, types, causes, effects and distribution | Make different seismic zones on the map of H.P. |
| 06 | 03 | Soil | Definition, characteristics, factors of soil formation classification, distribution and significance. | - |
| 07 | 04 | Underground Water | Underground water level, Water level, wells, springs, Hot water springs and Geyser – Landscape, development in lime stone regions. | - |

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| 08 | 12 | Exogenous Processes | Process of Gradation, aggradations and degradation, Weathering and erosion, fluvial Process, erosional and depositional Features associated with rivers, normal cycle of erosion. The work of wind, waves and Glaciers, erosional and depositional features of respective landscapes processes. | Prepare a model showing three different stages of a river. |
| 09 | 03 | Atmosphere | Composition and structure of atmosphere, elements of weather and climate. | - |
| 10 | 04 | Insolation and Temperature | Insolation, factors affecting insolation, heat budget, horizontal distribution of temperature, vertical distribution of temperature and inversion of temperature. | Observe minimum temperature in your school daily and prepare a chart for it. |

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| 11 | 05 | Atmospheric Pressure | Atmospheric Pressure, Winds and Jet streams , Measurements of Pressure, Horizontal and vertical distribution, Pressure Belts, winds, Air Masses, High Altitude winds, Jet streams. | i) Prepare a chart to observe wind direction with the help of wind vane in your school. |
| 12. | 05 | Precipitation | Evaporation, condensation, dew, frost, fog, mist, clouds, rainfall, types of rainfall, conventional, orographic and cyclonic rainfall, world distribution of rainfall. | Observe various types of rainfall in your region. |
| 13. | 03 | World Climate | Classification of climate (Trewartha) greenhouse effect, global warming and global climatic changes. | Show on the map of the world the climatic classification presented by Trewartha. |
| 14. | 06 | Hydrosphere | The profile of oceans Basins, classification, | i) Prepare a chart to show |

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| 15. | 03 | Life on the Earth | <p>distribution of temperature in the ocean. Distribution of salinity, circulation of ocean water, hydrological cycle, waves, currents, tides. Life in the ocean, Basin ocean, Ocean deposits, vegetation and living organisms.</p> <p>Biosphere, nature, concept of Eco-system, Energy flow impact of man on Eco-system and achievements.</p> | <p>hydrological cycle.</p> <p>-</p> <p>i) Prepare detail note on the biodiversity of your local area.</p> |
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Geography
Class – XI
India – Physical Environment
Section – B

| Sr. No. | Period | Topic | Subject Matter | Geographical Skills |
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| 01 | 04 | India Location | Location, size, India and its neighbours. | i) On the map of India show the newly created states. ii) Show the state having boundaries with H.P. |
| 02 | 12 | Structure And Physiography | Geological structure, Physiography. The Himalayas, North Indian Plain, the peninsular Plateau, the Indian desert, the coastal plains and the Islands. | i) Show on the map of India the major peaks of Himalayas. ii) Show the parts of peninsular India in the map. iii) Make a model of India with the help of local |

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| 03 | 12 | Drainage System | <p>The Himalayan Drainage System: The Indus system, The Gangetic system, and the Brhamputra system. The peninsular system. East and west flowing rivers, river regime extent and usability.</p> | <p>suitable material.</p> <p>i) Show the major rivers of India on the map. ii) Make a bar diagram to show the catchment area of major rivers.</p> |
| 04 | 14 | Climate | <p>Factors affecting the climate of India. Nature of Indian monsoon, distribution of rainfall, the cycle of seasons, Impact of monsoon on Indian economy, climatic classification of India (Koeppen's classification) global warming.</p> | <p>i) Show the following features on the outline map of India. ii) Areas receiving rainfall due to western disturbances. iii) Wind direction in summer season. iv) Isotherms of 15°C v) Isohyets of 200cm. vi) Discuss the impact of</p> |

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| 05 | 13 | Natural Vegetation | Types of forests, forest cover in India, forest conservation, social and farm forestry, wild life and wild life conservation in India, sanctuaries and national parks, biosphere reserves. Latest map of sanctuaries and natural parks of India. | <p>industrialization in India on global warming.</p> <p>i) Make a list of endangered species of natural vegetation in your locality.</p> <p>ii) Show the following features on the map of India- Evergreen forest, Alpine forest and Sunderban.</p> |
| 06 | 03 | Soils | Classification of soils, soil degradation, soil erosion, soil conservation. | <p>i) Collect the various samples of soil and prepare a report on the types of soil in your locality.</p> <p>ii) Show areas of black soil, alluvial soil and red soil.</p> |
| 07 | 07 | Natural Hazards And Disasters | Natural disaster and hazards in India:- | Make a report of land slide or |

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| 08 | 06 | Himachal Pradesh | <p>Earthquakes, Tsunami, tropical cyclone, floods, droughts, landslides, forest fire, cloud bursts, and disaster management.</p> <p>Mechanism of cloud bursting with the help of diagrams, photographs related to cloud to bursts phenomenon.</p> <p>Physiography :- Relief, physiographic divisions, drainage system, major rivers, concept of water shed/Mid Himalayan, climate, vegetation, soils and wild life.</p> | <p>cloud burst activity in your locality.</p> <p>i) Show the major peaks of HP. On the map of H.P.</p> <p>ii) Show the origin place of major rivers of H.P. on the outline map of H.P.</p> |
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Geography
Class – XI
Practical work

Total Period = 30

Unit – I Fundamental of Maps

1. Maps – types; Scales – types; Construction of Plain, Comparative and diagonal scales, measuring distance, finding direction and use of symbols.
2. Latitude, Longitude and time;
3. Map Projection – typology, construction and properties of conical with one standard parallel and Mercator's Projection.

Unit – II Topographic and Weather Maps

1. Study of topographic maps (1:50,000 or 1:25,000, survey of India maps) : contour cross section and identification of land forms – slopes, hills, valleys, water falls, cliffs : distribution of settlements;
2. Aerial photographs and satellite images.
3. Aerial Photographs: Types of Geometry –vertical aerial photographs: difference between maps and aerial photographs; photoscale determination.
4. Satellite images : Stages in remote Sensing data acquisition, platform and sensors and data products (Photographic and digital).
Interpretation of Physical and Cultural features from aerial photographs and satellite imageris.
5. Use of weather instruments: thermometer, wet and dry-bulb thermometer, barometer, wind wane and rain gauge.
6. Use of weather charts: describing pressure, winds and rainfall distribution.