

LATEST SYLLABUS

CLASS 11

PART A FUNDAMENTALS OF PHYSICAL GEOGRAPHY (35 Marks)

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

UNIT 2 The Earth

- Origin and evolution of the earth : interior of the earth Earthquakes and volcanoes: causes, types and effects
- Distribution of oceans and continents : Wegener's continental drift theory and plate tectonics.

UNIT 3 Landforms

- Geomorphic processes: weathering; mass wasting; erosion and deposition; soil-formation
- Landforms and their evolution- Brief erosional and depositional features

UNIT 4 Climate

- Atmosphere- composition and structure; elements of weather and climate
- Solar Radiation 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
- Atmospheric circulation and weather systems Pressure-pressure belts; winds-planetary, seasonal and local; air masses and fronts; tropical and extra tropical cyclones
- Water in the atmosphere Precipitation-evaporation; condensation-dew, frost, fog, mist and cloud; rainfall-types and world distribution
- World 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

UNIT 6 Life on the Earth

- Biosphere - importance of plants and other organisms; biodiversity and conservation;

*Map work on identification of features based on 1 to 6 units on the outline
Physical/Political map of the world.*

PART B INDIA-PHYSICAL ENVIRONMENT

(35 Marks)

UNIT 7 Introduction

- India : Location, space relations, India's place in the world

UNIT 8 Physiography

- Structure and Relief; Physiographic Divisions
- Drainage systems: Concept of river basins, watershed; the Himalayan and the Peninsular rivers

UNIT 9 Climate, Vegetation and Soil

- Weather and climate - spatial and temporal distribution of temperature, Indian monsoon: mechanism, onset and withdrawal,
- Natural vegetation-forest types and distribution; wild life; conservation, biosphere reserves

UNIT 10 Hazards and Disasters: Causes, Consequences and Management

- 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 labeling on the outline Political/Physical map of India

PART C PRACTICAL WORK IN GEOGRAPHY PART I

(30 Marks)

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)

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
- Satellite imageries, stages in remote sensing data- acquisition, platform and sensors and data products, (photographic and digital)

Practical Record Book and Viva Voce

Viva to be based on Practical Unit I and II only.