

## Geography

### POST GRADUATE DEGREE STANDARD

#### UNIT 1.1

##### Geomorphology :

Origin and evolution of the earth's crust - Earth movements - Plate Tectonics - Volcanism - rocks weathering - erosion - cycle of Erosion - cycle concepts (Davis and penk) - Rejuvenation - Glacial - marine - karst - land forms - Morphogenetic regions

#### UNIT 1.2

##### Climatology :

The atmosphere, its structure and composition - temperature (vertical and horizontal distribution) - Pressure (vertical and horizontal distribution) winds - Jet stream - Air masses and Fronts cyclones - Climatic classifications (Koeppen and Thornthwaite).

#### UNIT 1.3

##### Oceanography :

Bottom morphology of major oceans - temperature - salinity distribution - currents of the major oceans - Tides - coral reefs - Deposits of the Ocean floor.

#### UNIT 1.4

##### Geography of World Resources :

Resource - Types - Agricultural resources - Geographical Distribution of Rice - Wheat - cotton - Tea - coffee - sugarcane in the world. Animal Resources: cattle and sheep farming world fishery resources: major fishing grounds of the world. Mineral resources: Distribution and production of iron ore bauxite and copper in the world. Power resources: Coal - mineral oil - Hydel power - Atomic power. Industries: localisation factors of Iron and Steel - Textile & Cotton and Wollon - ship building - chemical - Automobile Industry. Transportation : Land - water - Air transportation major sea routes of the world Trade: Factors influencing the trade-Trade blocks of the world [EEC, COMCON and OPEC].

#### UNIT 1.5

##### Environmental Studies:

Eco system - man and his environment mode of life of people in Hot deserts - Equatorial and Polar regions - concepts of Determinism - Possibilism - Proximalism - Eco system concept - natural hazards - Pollution types - environmental planning and management - Environmental impact Assessment [EIA]

#### UNIT 1.6

##### World Population:

Growth and distribution - Density of population - Theories of Population: Malthus - optimum population - Demographic transition. Migration: types - causes and consequences.

#### UNIT 1.7

##### Geography Rural and Urban settlements:

Rural settlements: Siting factors - types. Urban settlements: Site and situations - Classification of Towns - Morphology of Urban settlements - concentric zone - Sector - Multiple Nuclei Theories - CBD delimitation of CBD - Rural and Urban Fringe - Urban Fringe - Urban Sprawl - Hierarchy of Urban settlements - Christaller's Central Place Theory - Urban Problems and planning.

#### UNIT 1.8

##### Cartography:

Historical development - Maps - Types - Map Design and Layout - Quantitative and Qualitative - representations - Point - Line - Area symbols - Map compilation and generalization - Reproduction of Maps - Computer Applications in cartography.

#### UNIT 1.9

##### Quantitative Techniques in Geography:

Sources of data - sampling Techniques - Descriptive and application aspects of correlations (Simple, Multiple, Rank) - Regression - Chi-square Test - F Test - T Test - Gravity and potential models - Centographic measures - Mean and Median centres - and standard distance.

#### UNIT 1.10

##### Modern Trends in Geography:

Concept of region - classification - Hierarchy - Regional Planning. Types of planning - Multi level, Tribal Area - Drought prone command Area river Barious of Metropolitan Area planning. Concepts in Remote sensing - Application of Remote sensing - in Environmental studies - Resources inventories - Urban land use planning, Geographical information system (GIS) - System Analysis - Use of Models in geographic reseach.

#### PAPER - II

##### GEOGRAPHY OF INDIA AND TAMIL NADU.

#### UNIT 2.1

##### Physiography:

Relief - Climate - Floods and drought prone areas Vegetation - Soil

#### UNIT 2.2

Resources: Fisheries - Sheep and cattle Agriculturist resources: Distribution of Food crops (Rice wheat and Millets) - Plantation (Tea, Coffee, Sugarcane and Rubber) - Fibre crops (cotton and Jute) Agricultural problems - Agriculturist practices in Dry Zone regions - Green Revolution - Globalization of Indian Agriculture.

#### UNIT 2.3

Mineral Resources: Distribution and production of Coal - Manganese - Mica - Iron ore - Bauxite and copper.

#### UNIT 2.4

##### Industries:

Localisation of Iron and Steel Cotton Textile - Cement chemical and Electronic Industry.

#### UNIT 2.5

##### Population:

Growth and distribution - Problems Population of policy of Indian - Urbanuzation - Pollution Problems in Indian Cities.

#### UNIT 2.6

##### Transport:

Road - Railways - Air and water ways Trade : Internal and International

#### UNIT 2.7

##### Planning:

Unevenness of Resources - Problems - Necessity for planning - Centralised and decentralised Sectoral Planning Achievements of VIIIth Plans:- Sallent features of IXth Five Year Plan.

#### UNIT 2.8

TAMIL NADU:Introduction - Physiography - Climate - Flood and drought prone areas - soil - Vegetation. Resources: Agriculture - Distribution of Rice - Cotton Sugarcane and Tea - Green Revolution.

#### UNIT 2.9

Mineral Resources: Coal - Iron ore - Manganese Mineral oil. Power Resources: Hydel power- Thermal Power Non Conventional Energy (Wind power) Industries : Cotton Textile - Silk - Cement and paper.

#### UNIT 2.10

Growth and Distribution - density pattern - Million Cities in Tamil Nadu. Transport: Road ways - and Railways. Planning: Planning Regions of Tamil Nadu - Role of Micro Planning in the Development of Tamil Nadu.