SYLLABUS GEOGRAPHY

PAPER-I

PHYSICAL AND PRACTICAL GEOGRAPHY

UNIT-1

GEOMORPHOLOGY:

Origin of the earth, Rotation and Revolution, Latitude and Longitudes, solar system.Factors controlling landform development, Endogenetic and Exogenetic forces, Denudation process, weathering and erosion, Geosynclines, mountain building, continental drift and plate tectonics, concept of Geomorphic cycle, landforms associated with fluvial, glacial, arid ,coastal and karst cycles. Slope forms and processes.

UNIT-2

CLIMATOLOGY:

Composition and structure of the atmosphere, Insolation, heat budget of the earth, Distribution of temperature, Atmospheric pressure and general circulation of winds, Monsoon and Jet streams, stability and instability of the atmosphere, Air masses, Fronts, temperature and tropical cyclones, types and distribution of precipitation, classification of world climate- Koppen's and Thorn waits schemes, Hydrological cycle, Global warming and climate change.

UNIT-3

OCEANOGRAPHY:

Origin of ocean basins, bottom relief of Indian, Atlantic and Pacific oceans ocean deposits, coral reefs, temperature and salinity of oceans, density of sea water, Tides and ocean currents, sea-level changes, Human impact on marine environment.

UNIT-4

ENVIRONMENTAL GEOGRAPHY:

Concept of Ecosystem, Forms and functions of eco-system, Forest, grassland, marine and mountain eco-system, Biodiversity and its depletion through natural and man induced causes, conservation and management of eco-systems, Environmental hazards and problems of pollution, ozone layer depletion, Environmental Impact Assessment (ECA), Environmental policies-National and International.

UNIT-5

PRACTICAL GEOGRAPHY:

Map as a tool in geographical studies, types of maps, Techniques for the study of spatial patterns of distribution, single purpose and composite maps, Choropleth and Isopleth maps and Pie- diagrams, mapping of location- specific data, accessibility and flow maps.

Remote sensing and computer application in mapping, Geographic information system (GIS) Thematic maps

Data sources and types of data, statistical diagrams, study of frequency distribution and cumulative frequency, measures of central tendency, selection of class intervals for mapping, measures of dispersion and concentration, standard deviation, Lorenz curve, Methods of measuring association among different attributes- simple correlation, regression. Measurment of spatial Patterns of distribution, Nearest- Neighbour analysis, sampling techniques for geographical analysis.

PAPER-II

HUMAN GEOGRAPHY AND HISTORY OF GEOGRAPHIC THOUGHT

UNIT-6

HISTORY OF GEOGRAPHIC THOUGT:

Development of geographic knowledge during the ancient and Medieval period, Foundations of modern geography, contribution of German, French, British American schools, conceptual and methodological developments during the 20^{th} century, changing paradigms, man and environment relationship, determinism and possibilism, areal differentiation, dualism in geography, quantitative revolution, theory and model building process in geography.

UNIT-7

POPULATION AND SETTLEMENT GEOGROPHY:

Patterns of world distribution, growth and density of population, fertility and mortality trends and patterns, pattern and processes of migration,

Demographic transition, population resource regions of India and world, population policies.

Site, situation, types, size, spacing and internal morphology of rural and urban settlements, Ecological processes of urban growth, urban fringe, urban agglomeration, city region, settlement systems, primate city, Rank size rule, settlement hierarchy, Christaller's central place theory, Angnst Losch's theory of market centres.

UNIT-8

ECONOMIC GEOGRAPHY:

Location of economic activities and special organisation of economics, classification of economics, sectors of economy: primary, secondary, tertiary and quaternary, Natural resources: Renewable and non-renewable. Exploitation and conservation of resources. Concept and techniques of delimitation of organisational regions, measurement of organisational productivity and efficiency, crop combinations and diversification, Von Thunen;s and Thrnson agricultural models. Classification of industries, Location factors: Weber's Hoover and Losctis approaches, Recourse based and footloose industries. Modes of transportation, net-work analysis accessibility and connectivity.

UNIT-9

CULTURAL AND POLITICAL GEOGRAPHY:

Concept of culture, Themes of cultural geography, cultural diffusion, cultural realms of the world, race, religion, languages, major tribes of the world and India.

Geopolitics, global strategic views (Heartland and Rimland theories), concept of nation, state and Nation state, boundaries and frontier's.

UNIT-10

REGIONAL PLANNING: Regional concept in geography, it's application to planning, concept of planning region, Regional hierarchy, types of regions and methods of regional delineation, conceptual and theoretical framework of regional planning, regional planning in India, concept of development, Indicators of development, regional imbalances.

UNIT-11

GEOGRAPHY OF INDIA AND KARNATAKA:

Physiographic divisions, climate: it's regional variations, vegetation: Types of vegetation regions, major soil types, coastal and marine resources, water resources, irrigation, agriculture, agro-climatic regions, mineral and power resources, major industries and industrial regions, population distribution and growth, settlement patterns, regional disparities in social and economic development.