

(10) Geography (Subject Code - 10)

Principles of Geography

PAPER - I

**Section A : Physical Geography**

i) **Geomorphology** : Origin and evolution of the earth's crust; earth movements and plate tectonics; volcanism; rocks, weathering and erosion; cycle of erosion-Davis and Penck fluvial, glacial and marine and karst landforms; rejuvenated and polycyclic landforms.

ii) **Climatology** – The atmosphere; its structure and composition; Temperature; humidity, precipitation, pressure and wind; jet stream; air masses and fronts; cyclones and related phenomena; climatic classification-Koeppen and Thortwait; ground water and hydrological cycle.

iii) **Soils and Vegetation** – Soil genesis, classification and distribution, Biotic successions and major biotic regions of the world with special reference to ecological aspects of savanna and monsoon forest biomes.

iv) **Oceanography** – Ocean bottom relief; salinity, currents and tides; Ocean deposits and coral reefs; Marine resource-biotic mineral, and energy resources and their utilization.

v) **Ecosystem** – Ecosystem concept, interrelations of energy flows, water circulation, geomorphic processes, biotic communities and soils; land capability; Man's impact on the ecosystem, global ecological imbalances.

**Section - B : Human and Economic Geography -**

i) **Development of Geographical Thought** – contributions of European and Arab Geographers, determinism and possibilism; regional concept system approach, models and theory; quantitative and behavioral revolutions in geography.

ii) **Human Geography** – Emergence of man and races of mankind, cultural evolution of man; Major cultural realms of the world; International migrations past and present; world population distribution and growth; demographic transition and world population problems.

iii) **Settlements Geography** – Concepts of rural and urban settlements; Origins of urbanization; Rural settlement patterns; central place theory; rank size and primary city distributions; city classifications urban spheres of influence and the rural urban

fringe; the internal structure of cities-theories and cross cultural comparisons; problems of urban growth in the world.

iv) **Political Geography** – Concepts of nation and state; frontiers boundaries and buffer zones; concept of heartland and rimland; federalism; political regions of the world; world geopolitics; resources-development and international politics.

v) **Economic geography** – world economic development and problems, World resources, their distribution and global problems, world energy crisis, the limits of growth. World agriculture; typology and world agricultural regions, Theory of agricultural location, Diffusion of innovation and agricultural efficiency, World food and nutrition problem, World industry; Theory of location of industries, world industry patterns and problems, World trade theory and world patterns.

### PAPER –II

#### **Geography of India, with Special Reference to Karnataka**

**Physical Aspects** – Geological history, physiography and drainage systems; origin and mechanism of the Indian monsoon, identification and distribution of drought and flood prone areas; soils and vegetation; land capability, schemes of natural physiographic drainage and climate regionalisation.

**Human Aspects** – Genesis of ethnic / racial diversities; tribal areas and their problems; the role of language, religion and culture in the formation of regions; historical perspectives on unity and diversity; population distribution, density, and growth; population problems and Policies.

Resources Conservation and utilization of land, mineral, water, biotic and marine resources; man and environment-ecological problems and their management.

**Agriculture** – The infrastructure, irrigation, power fertilizers, and seeds; institutional factors-land holdings, tenure, consolidation and land reforms, agricultural efficiency and productivity; intensity of cropping, crop combinations and agricultural regionalization, green revolution, dry zone agriculture, and agricultural land use policy; food and nutrition; Rural economy-animal husbandry, social forestry and household industry.

**Industry** – History of industrial development, factors of localization; study of mineral based, agro-based and forest based Industries; Industrial decentralization and Industrial policy; Industrial complexes and Industrial regionalization; Identification of backward areas and rural Industrialisation.

**Transport and Trade** – Study of the network of roadways, railways, airways and waterways, competition and complementarity in regional context, passenger and commodity flows, intra and inter regional trade and the role of rural market centres.

**Settlements** – Rural settlement patterns; urban development in India; Census concepts of urban areas; functional and hierarchical patterns of Indian cities; city regions and the rural – urban fringes; internal structure of Indian cities; town planning, slums and urban housing; national urbanization policy.

**Regional Development and Planning** – Regional Policies in Indian Five year plans; experiences of regional planning in India; multi-level. Planning, state, district and block level planning; Centre-State relations and the constitutional frame work for multi-level planning. Regionalisation of planning for metropolitan regions; tribal and hill areas, drought prone areas, command areas and river basins; regional disparities in development in India.

**Political Aspects** – Geographical basis of Indian federalism, state reorganization; regional consciousness and national integration; the international boundary of India and related issues; India and Geopolitics of the Indian Ocean.