

Syllabus for Recruitment Examination of Post Graduate Teacher

SUBJECT: GEOGRAPHY

Principle of Physical Geography.

Unit I- GEOMORPHOLOGY

Definition, scope and developmental of Geomorphology, Origin and evolution of earth, different theories of origin of the earth, critical analysis of theories. structure of the earth's interior, different types of rocks, origin of continent and ocean, isostatic balance, theories of continental drift and plate tectonic, mountain building theory, geomorphic process endogenic process, volcanic, earthquake, folding and faulting, Exogenetic process - weathering, Erosion, mass wasting (Theories of Davis and Penck) Evolution of land form under the action river, wind , glacier and underground water.

Unit II:- CLIMATOLOGY

Composition and structure of atmosphere, Insolation and heat balance controlling Insolation, heat Budget Latitudinal heat balance, Temperature anomaly, atmosphere moisture, perception, form of perception, atmospheric pressure system, gradient, winds climate, world climate, global climatic changes, causes and effect.

Unit III: - OCEANOGRAPHY

Relief of ocean floor, submarine relief feature (Atlantic, Pacific and Indian Ocean), Movement of ocean water, current, tides and waves, temperature of ocean water (Horizontal and Vertical distribution), salinity, factors controlling salinity, marine deposit, marine lives. Corals, atolls and barrier reef, oceanic pollution.

Unit IV:- BIO-GEOGRAPHY

Definition of Ecology, concept and principle Ecosystem- meaning of ecosystem, functioning system, Soil, Genesis of soil, Factor formation, Soil profile, soil degradation and conservation, classification of world soil, Biomes of World, Deforestation and conservation of wild life, Bio- diversity, Biosphere reserves national parks and wild life sanctuaries.

Unit V:- HUMAN GEOGRAPHY

Evolution of human geography, definition, nature and scope, Approaches and recent developments in human geography, geographic thoughts- determinism, possibilism and neo-determinism, major human races of the world and dispersion, indices for racial delimitation, ethnicity and related problem.

Unit VI:- ECONOMIC GEOGRAPHY

Resources – concept of the resources, classification of resources , resources planning, agriculture- agricultures practices, major cereal and cash crops and their distribution, mineral and power resources, energy crisis in the world. Industry-factors of localisation and theories. Iron and steel industry, textile, Petro-chemical and electronic goods industries. Transport - mode of transport – a) land transport- road, trans - continental railway –b) water ways- sea or oceanic route, inland water ways, c) Air ways- Domestic and International airways -d) Pipeline , Communication – Types, medias satellite, internet and information technology. International trade-bases, component, trade blocs, pattern of trade, recent changes in international trade.

Unit VII:- POPULATION GEOGRAPHY

Distribution pattern of world population, factors influencing density & distribution, Growth of Population, causes and associated problems, issues, government policy.

Migration- Types, stems factors and consequences.

Unit VIII:- SETTLEMENT GEOGRAPHY

Settlement – types, Pattern, Morphology, hierarchy (Urban & Rural). Problems of urban settlement, slums and problem of waste disposal and Urbanization, Functional classification of towns, Geographical factors affecting growth of settlement, distribution and types settlement- Rural and Urban.

Unit IX:- REGIONAL GEOGRAPHY

Concept of region, area, zone regionalization in the world, regional disparity, regional development strategies and Environmental issues is regional planning for sustainable development.

APPLIED GEOGRAPHY

Unit X:- GENERAL GEOGRAPHY –

Map- Elements of Map making, Representation of Scale, conventional sign, map projection and interpretation of topographical map. Weather instrument and interpretational, Digital mapping, remote sensing, Thematic mapping (Dot method, choropleth method, iso pleth method). Representation of data - bargraph, histogram, line graph, multiple bar & compound bar , Pie diagram etc. principle of sampling, spatial information technology, GIS, GPS and computer hardware and software, application of computer in data analysis.. Measure of central - tendency, dispersion, mean, median, mode, skewness, coefficient of correction and rank differentiation. Cartographic techniques- contours, climatograph, ergograph.

(Geographical of India)

Unit-XI Location setting of India;

Extend, area neighbouring, spatial relation.

Unit-XII Pysiography of India.

Major physical division, brief geography history of Himalayas, Peninsular plateaus, northern plains and island group, distinctive feature of each physical entity, drainage system. Main feature.

Unit XIII;- The Climate of India

Main elements of India climate, classification of India climate, Koeppen's & thornthwait's climate regions of India, Deference in the scheme of their classification

Unit XIV;- Population of India

Distribution pattern, factor of population distribution, regional variation, population concentration index, Density of population- regional variation. Density measures, population density region, growth of population ,types ,factors , regional variations, causes & consequence of rapid growth, population types .Demography and culture attributes of population , Age structure sex ratio, occupational structure ,literacy, religion composition of population, ethnic composition Migration-causes and consequence.

Unit XV ;- Agriculture of India :-

Agriculture as the basis of India economy, agriculture practices, problem strategies of development, transformation of India agriculture from traditional to modern. Package technology- positive and negative impact, Major crops- wheat, rice, sugarcane, cotton, jute, tea, rubber distribution and production pattern, food budget of India, India agriculture and bio- technology, impact of globalisation on agriculture.

Unit ;- XVI. Industries;-

History of manufacture in India, location factors of industries major industries – iron & steel, cotton textile, sugar, petro- chemical, fertilization and cement industries, industrial regional of India, major and minor industrial districts, national industrial policy. Prior of modern industries. Hi- tech industries;- main feature, impact of new trade, polices – globalization liberalization and privatization on Indian Industries, classification of industries.

Unit:-XVII Mean of Transportation and Communication-

Roles of means of transport and communication on India economy, Modes of transportation.- land transport-roads ways, rail, ways and ropeways, water transport –inland and oceanic air transport main sector, pipe line transport, comparative importance of difference means of transport. Mean of communication- media of means communication, internet and satellite communication in India.

Unit- XVIII:- Human Settlement –

Types, pattern, Morphology of India town. Function classification of town, problem of waste disposal.

Unit-XIX:- Planning in India –

Five year plan, planning strategies in India, integrated development project, tribal areas development project, hills area development project , development drought prone area programme, desert area programme, water shade development project, Indira Gandhi canal command area development project – Main achievement Environment Issue & sustainable development.

Geography of North – Eastern India with special reference to Arunachal Pradesh

Unit- XX:- Location- N/E India-

Physiographic, climate, drainage, soil and vegetation.

Unit XXI :- Ethnic composition-

Racial history of tribal group of Arunachal Pradesh, their spatial distribution, culture traits

Population – Pattern of distribution and density, state wise their spatial distribution and density, state wise and district wise, factor controlling distribution and density pattern, Age- sex composition, working and non- working population, literacy and religious composition (with special emphasis to Arunachal Pradesh). Population growth –pattern, factor and population projection.

Unit XXII :- Resource base and Economic Development

Agriculture – Main practice, major crops, distribution of crops, problem and prospects of development.

- (a) Mineral resources – Main mineral- distribution pattern.
- (b) Water resources – prospects of hydro-power development in Arunachal Pradesh.
- (c) Forest and wild life resources –Types of forest, forest product conservation measures and wild life sanctuaries, bi- reserved national park.
- (d) Industrial major industries, growth and prospects.