



जननायक चंद्रशेखर विश्वविद्यालय, बलिया
Jananayak Chandrashekhar University, Ballia



DEPARTMENT OF GEOGRAPHY
JANANAYAK CHANDRASHEKHAR
UNIVERSITY, BALLIA

Course Structure for Ph.D. (Doctor of Philosophy)
Admission Test

Department of Geography

ACADEMIC SESSION -2018-19

JANANAYAK CHANDRASHEKHAR

UNIVERSITY BALLIA

Syllabus For P.H.D Admission Test

Session 2018-19

GEOGRAPHY

Time- 2:00 hours

Max Marks- 100

Paper-I- Research Aptitude/ Methodology

A-Logical Reasoning

B-Graphical Analysis

c-Analytical & Numerical Ability

D-Quantitative Comparisons

E-Series Formation

F-Puzzles Etc.

Time- 3:00 hours

Max Marks- 200

Paper-II Area of Specialization

Agriculture Geography:

Aims, objectives and scope of Agricultural Geography: Basic concepts, Historical Perspective and recent trends. Approaches to the study of agricultural geography- Regional and Systematic approach. Ecological and Commodity approach. Influence of major Factors on the performance of agriculture. Whittlessey's classification of agricultural systems of the world- problems and prospects of agriculture and its economic impact in regions of the world Concept of Land use. Agricultural land use Land capability classification and land use planning for agricultural development. Agricultural Regionalization. Land Use Location Theory- Von Thunen and its applicability: Modern Theories of Agricultural Location Optimum Physical and Economic Conditions and Limits. Green Revolution in India, impact of green revolution in India, Green Revolution and regional imbalances. Problems of Indian Agriculture, Measures For Agricultural Development. Concept of second green revolution in India.

Population Geography:

Nature, scope, significance and historical development of population geography. Sources of population data with reference to India. Spatial distribution, growth and density of population in the World. Population Dynamics: Fertility and mortality measurement, determinants and world

distributions; Migration: types determinant and consequences, patterns of international and internal migration, brief introduction of models and theories of migration (Ravenstein and Zelinsky). Population composition (India): Sex composition-measures, determinants and distribution. Age composition: various systems of age groupings, determinants and distribution; Occupational structure, measures working population, determinants of work force, types of workers. Demographic transition theory, Malthus theory, Ackerman scheme of population resource region, population problems in India, Population policy of India, Human development index (HDI) and its components.

Environmental Geography:

Meaning and scope of Environmental Geography, Relations of environmental geography with other sciences, meaning, component and types of environmental geography, approaches to the study of man-environment relationships, Ecosystems, meaning, types and components of ecosystem, Function of ecosystem, trophic levels. Food chain and Food webs. Ecological pyramid and Flow of energy. Environmental Degradation and Pollution: concept and types of Environmental Degradation, causes of Environmental. Degradation, sources and types of pollution, Air Pollution, adverse affect of air pollution on weather and climate, ozone depletion, green house effects, effects on human health, water pollution; surface and ground water, adverse effects on human health. Environmental Planning and Management: Environmental management- methods and approaches: Ecological basic of environmental

management- Ecological principles: Survey, evaluation, Preservation and conservation of resources.

Regional Planning and Development:

World History of Regional Planning: a brief overview, Concept and Nature of Regional Planning: viz. complex, inter-disciplinary and Future-oriented nature. Types of Regional Planning: basic types, viz., short and long term, single and multilevel, centralized and decentralized. Decentralized planning in India: salient features. Concept and Types of Regions: basic types, especially formal, Functional and perceptual. Concept and Methods of Regionalization: an overview. Concept and Essential Characteristics of Planning Regions: basic requirements for making a geographic region a planning region. Planning Regions in India: a brief overview of regionalization. Concepts and types of Development: salient Features of economic development, sustainable development and human development. Economic Growth and Economic Development: their contrast and indicators of measurement. Types of Economic Systems in the World; an overview. World Socio-Economic Disparities: a quantitative representation of selected countries From various regions. Regional Disparities in India; inter-state socio-economic disparities. Regional Development in Post-Reform India: an overview.

Geography of Rural Development:

Rural development: A geographical perspective. Theoretical Framework of rural development. Structure and spatial organization of rural settlement. Rural markets and market Centers, Growth point and growth

centers. Theories of central places. Rural-Urban Relationship and their integration. Rural Land use and its problems. Dimensions of rural economy, physical and human resources-their spatial patterns and interrelationships, socio-economic dimensions, infrastructural Facilities, socio-cultural organization. Migrations and their causes Characteristic of rural population, agricultural and its characteristics. Social issues of rural areas- poverty, housing and shelter, deprivation and inequality. Empowerment of women, health care, socio tension and underdevelopment. Environmental issues-access to environmental infrastructure-water supply, sanitation, drainage, occupational health hazards. Balanced development strategies of India-Failure and success of various schemes sponsored by government For rural development. Government agencies and NGOS, Integrated rural development strategy.

Geography of Resources:

Concept and scope of resource geography and geography of resources, Resource concept and types, world resources distribution and pattern, Land, Water, mineral and power resources. Human resources, Resource base and its dynamism as related to stages of cultural technological and economic development, population growth and resource scarcity hypothesis, Sustainable development. Factors of Location of Economic Activities-physical, Social, Economic and Cultural, Von-Thuenen model of agricultural location, Agriculture regions of the world. Resource regionalization, world economic development, concept of developed and developing countries, Resource conservation and management, Resource development and international policies.

Urban Geography:

Internal Structure of cities: Meaning, scope and significance of Urban Geography; urban morphology and land use patterns, classical models of urban growth and evolution of Functional zones- Burgess's Concentric Zone Theory; Hoyt's Sectoral Model; Harris and Ullman's Multiple Nuclei Model- Formulation, salient Features and critical evaluation of these models; CBD- meaning, internal structure, characteristic Features and method of its delineation. City-Surrounding Relations:- The urban economic base-terminology, concepts, geographic qualities of the basic, non-basic concepts; the city's spheres of influence (Umland)- methods of its determination; rural-urban Fringe- conceptual explanation, internal structure, characteristic Features. Settlement Theories and Concept:- The study of Walter Christaller's Central Place Theory and August's Losch settlement theory in the Following heads- Initial Formulation of the model and later developments; Salient Features of the model and its applicability; Losch's Theory of settlement-generalization and development of Central Place Model by August Losch; Rank-Size Rule and Law of Primate City. Urbanization: Urbanization as a process of transformation-demographic process, economic process and socio-cultural process Spatial pattern and trends of urbanization in India, patterns of urban growth in India- decadal, regional, different size classes of towns (I-VI).

Settlements Geography:

Definition and scope , Approaches to study the settlements geography. Archeological finds and settlements-Mesopotamia. The Nile valley, the Indus valley. Place names versus settlement. The rural urban continuum. Characteristics of rural settlements. Distribution of rural settlements with reference to size and spacing. Types and patterns of rural settlements and their cause and effect relationships. Regularity in land use around settlements- Von Thunen Model. Theories explaining the internal structure of cities- The concentric ring theory, The multiple nuclei theory. Functional classification of urban centres- Harris and Nelson Rural service centres. Theory of Christaller and its application. Theory of Losch and its application. Settlement planning.

Political Geography:

Nature, Scope, development, recent trends and approaches of political geography. Major schools of thought in political geography. Political geography vs. geopolitics, geographic elements of the state-physical, human & economic. The methodology of political geography: A critical analysis of the Functional unified theory. Genetic, Functional and systems approaches, Function and classification. Themes in political geography, state, nation. Nation-state and Nation building, Frontiers and boundaries. Colonialism, Decolonialisation, Neocolonialism, Federalism and other Forms of governance. Global strategic view with particular reference to the ideas of Mahan, Mackinder, Spykeman and De Seversky. The changing pattern of super powers and super nationalism. Impress of politics upon the environment Framework. Elements of electoral geography. Political geography of contemporary India, India: a global

strategic view, India's border with neighboring countries especially with Pakistan, China and Bangladesh. Geopolitical significance of Indian Ocean. SAARC region and India. The changing political map of India.

Disaster Management:

Definition, meaning and concept of disaster and hazard. Types of Hazards- Natural and man-made. Concept of Disaster Management Concept of Disaster Relief, Rescue, Trigger mechanism, Response, Mitigation Risk and Vulnerability. Natural Disaster- Geological, Water and climate, Environmental. Man-Made disaster- Chemical, Industrial, Nuclear, Accident. Biological disaster- Epidemics, Pest- Attack,, Cattle epidemic, Food poisoning. Social Response to Disaster- reduction. Identification of multiple disaster prone areas. Natural Disaster reduction Management, Decision making policy. Determination of acceptable level of Risk. Measures to control and mitigate disaster. Role of NDMA and SDMA.

Marketing Geography:

Marketing Geography: Definition, scope and significance. Growth and development Approaches of study: Commodity, Spatial, Social, Economic, Behavioral. Application of Planning: Market, Urban, Agriculture. Markets: Classification, structure and hierarchy Markets participants, Market Channel and Trade Area. Theoretical Framework For Study of Market Centres: Christaller and Losch Model of Market Locations; B.J. Berry's Model and Reilly's Models of interaction and trade area delimitation. Trade: Classification and structure: Local,

Regional, National and International. Historical Development of Trade, Factors of Development of Trades. International Trade, World Trade Organization, World Trading Zone: SAFTA (South Asian Free Trade Association), NAFTA (North Atlantic Free Trade Association). Indian Agricultural Marketing: Definition, Types and Structure, Formal, Marketing: Regulated, Government Purchase Centres, Informal Marketing: Local, Regional, Private Traders, Processing Units. Marketing Channels, Foodgrains and Vegetables, WTO and Agricultural Marketing: Its impact on agriculture, environment, Food Security and Society.

Industrial Geography:

Localization of Industries and Theories: Nature, scope, and recent developments of Industrial Geography. Factors of localization of industries. Theories and models of industrial Location: Weber and Hoover. Critical review and application of industrial location theories. Pattern of Industries and Industrial Regions. Distribution patterns of important industries: Iron and steel, Cotton Textiles, Chemicals and Petrochemicals. Method of delineating industrial regions: Major industrial regions of the World with special reference to North America. Degradation and Globalization: Environmental degradation caused by industries, Industrial hazards and occupational health. Impact of industries on economic development. Role of globalization on industrial sector. Major Industrial Regions of India: Location, characteristics, chief industries and associated problems of each region. The Mumbai- Pune industrial region. The Chhotanagpur industrial region.