

**Babasaheb Bhimrao Ambedkar Bihar
University, Muzaffarpur
Directorate of Distance Education**

GEOGRAPHY

Syllabus for M.Phil (GEOGRAPHY) 1st and 2nd Semester Session 2014-2015

Semester I	Title of the Course	Marks			Credits
		IA	UE	Total	
Paper I	Research Methodology	20	80	100	4
Paper II	Quantitative and Cartographic Techniques in Geography	20	80	100	4
Paper III	Urban Geography	20	80	100	4

Semester II	Title of the Course	Marks			Credits
		IA	UE	Total	
Paper IV	Special Papers (Choose Any One) 1. Environment Geography 2. Agricultural Geography 3. Population Geography	20	80	100	4
Paper V	Special Papers (Choose Any One) 1. Medical Geography 2. Human and cultural Geography	20	80	100	4
Paper VI	Dissertation and VivaVoce Viva Voce 50 marks Dissertation 150 marks			200	8

**PAPER I
RESEARCH METHODOLOGY**

UNIT - I

Introduction Research : Nature, meaning and types; Philosophy and methodology in geograophy; empiricist approach, positivist approach : scientific methods; inductive and deductive approaches to resaerch; Humanistic and structural approaches

UNIT - II

Data Collection Methods of data collection : Primary data - observations and interview methods, preparation of questionnaire and schedule, sample and sample designs; secondary data - an appraisal of some basic secondary sources of socio- economic and demographic data with particular reference to India.

UNIT - III

Statistical Techniques Data Transforming, rank score, weighted score, parametric and non-parametric tests, hypothesis testing test of significance, one/two tailed tests, correlation analysis - simple zero order, multiple and partial correlations ; simple linear regression analysis, analysis of variance - one way and two way, principles components analysis

UNIT - IV

Research Design Research Design and Mechanics of report writing; Identification of the problem, review of literature, setting up of objectives, Hypothesis building, research plan and execution.

Selected Readings :

Johnston, R.J. (1991) Geography and Geographers - Anglo American Human Geography Since 1945, Edward Arnold, London. Johnston, R.J. (1983) Philology and Human Geography - Edward Arnold, London. Johnston, R.J. (1978) Multivariate Statistical Analysis in Geography, Longman Scientific & Technical Essex, England. Kothari, C.R. (2008) Research Methodology - Methods and Technique, New Age International (P) Ltd., Publishers, New Deek. Harvey, D (1969) Explanations in Geography, Edward Arnold, London. Misra, H.N. and V.P. Singh (eds.) (1998) Research Methodology in Geography, Rawat Publications, Jaipur. Misra, R.P. (1989) Research Methodology, A Handbook, Concept Publishing Co., New Delhi.

PAPER - II

Quantitative and Cartographic Techniques in Geography

Unit I-

Geographic data and field techniques: Development of quantitative methods in geography- data-collection of data- Sources and methods- physical-social- cultural and demographic data- field survey-Questionnaire and schedule-Sampling -need for sampling- methods - types - size of sample distribution and confidence limits

Unit II –

Measurement of data - levels of measurement -spatial data- Distribution measures-Centro graphic measures - standard distance - Nearest Neighbour technique.

Unit III -

Statistical Analysis of data- Correlation and regression analysis -hypothesis tesing - contingency tables Chi-square, 't' and 'F test'.

Unit IV -

Map making - preparation of base map - map compilation and generalization problems-Map Design and Layout - preparation of thematic maps.

Unit V –

Compact Application in Geography- data Analysis and mapping - Use of remotely sensed data in geographical analysis and mapping - GIS and GPS in geographical research. REFERENCES:

1. Monhkose & Wiliaison (1976) maps and diagrams, Mathew London.
2. Peter Toyne, Techniques in human geography.
3. Hemmond R Quantitative Techniques in Geography and introduction.
4. Cole King, Quantitative Geography.
5. Yeates, Introduction to Quantitative analysis in geography.
6. Najma Khan, Quantitative methods in geographical Research.
7. Taylor, Quantitative methods in Geography, Hinghtin and Mifflin.

PAPER III -: Urban Geography

Unit I –

Nature - scope and development of urban geography - urbanization factors of urban growth - world urbanization, urbanization in India.

Unit II –

Urban demography - population density models - age and sex structure -occupational structure - Economic Base- Basic & Non - Basic Function -functional classification.

Unit III –

Urban Landuse - types - models - social area analysis -CBD-delimitation - Urban ecology - quality of urban life.

Unit IV –

Urban expansion - vertical and horizontal - urban sprawl - rural urban fringe - suburbs- city region-umland demarcation.

Unit V –

Hierarchy of urban centers - rank-size rule-Christaller's central place concepts - urban problems-slums-pollution-water supply, transport planning

Reference:

1. Northam RM(1975) Urban Geography, John Wiley Sons, New York.
2. Carter. H (1972) The study of urban geography, Edward Arnold, London .
3. Misra R.B. & K.V. Sundaram (1971) Regional planning and Development, University of Mysore.
4. Gifts J.P., Urban Research Methods.
5. Hauscr .P.M. The Study of Urbanization.
6. Mandal B.P Urban Geography.
7. Kundu .A. Urban Development and Urban Research in India, Khanna Publications.

PAPER - IV:

1. ENVIRONMENTAL GEOGRAPHY

Unit-I

Nature and scope of environmental studies - role of geography in environment- man and environment relationship, Concepts: -Determinism - Possibilism - Marxian view on environment - concept of Ecosystem, Changing nature - Recent research in environmental geography in India.

Unit II

Ecosystem: structure - classification - Biomes - functioning of the ecosystem - food web - food pyramid - nutrient cycles - natural disruptions of the Ecosystem - Natural Hazards: causes and consequences, cyclone, floods, drought and famine and others and their impacts in India .Human interference on ecosystem - Population growth and its impact.

Unit III

Man's modification of the biosphere -lithosphere, atmosphere, hydrosphere - factors and effects, Mans impact on Agriculture -landuse - soilscropping- management green revolution -HYV-fertilizers- pesticides-needs and their implications - Man's impact on land, mining, soils and coastal areas and forest.

Unit-IV

Human settlements and environments- rural environment- urban environment-industrial environment-urban climate- rural and urban environment degradation- rural ecology- urban ecology - emerging problemshuman health- quality of life-management- emerging environmental degradation - emerging environmental issues.

Unit-V

Eco-crisis - Environmental management and planning - Environmental management in India-CIPCO movement- major environmental problems in India- Social forestry- Green India-environmental quality - environmental law and protection - environmental impact assessment and need for interdisciplinary approach- Earth summit- IPCC- UNFCCC.

Reference:

1. Odum.E.P. (1971) Fundamental of Ecology, W.B.Sunders Co, Philadelphia.
2. Peter Hagett (2001) - Geography - A.Modern Synthesis, Prentice Hall, London
3. Savindra Singh (1991) - Environmental Geography, Kalyan Publications, New Delhi.
- 4.Paul R. Ehrlich, Anne H. Ehrlich, and John P. Holdren (1977) - Ecoscience: population, resources, environment, Edition3, W. H. Freeman Publishers.

PAPER - IV:

2. AGRICULTURAL GEOGRAPHY

Unit-I

Agriculture Geography-definition-nature-Scope and content of agriculture geography-approaches to agriculture geography-origin of agriculture-Genecenter-Genecenter of the world-development and dispersal of agriculture-major agricultural systems of the world-Agriculture system in India

Unit II

Determinants of agriculture: physical- climate -Temperature - Rainfall- Humidity- Frost- Wind. Social determinant- land ownership and land tenure system in India- Land fragmentation-Economic determinant- Capital- Labour- Machineries- technological developments in Agriculture, - Models in Agricultural Geography: Von Thunen's model and Jonsasson's model.

Unit III

Agricultural Statistics-data-land data-soil data- G return- F Particulars- Sources- Government-Private- Other Agencies- Land use Survey- need for landuse survey- land use classification-USDA classification- and Indian classification - landuse survey in India- Remote sensing- GPS survey.

Unit-IV

Agriculture Regionalization- Concept of regionalization- Classification-Land capability classification- Crop region- Crop intensity- Crop concentration and diversification, crop combination regions - Definition- Crop combination analysis- Weaver, Doi and Rafiullah methods- Crop combination analysis in India.

Unit-V

Agricultural productivity -Factors determining- Agriculture productivity in India and Tamilnadu- Green revolution and its impact- HYV- Pesticides- Fertilizer- Technological development and their impact on agriculture landuseagriculture regions of India and Tamilnadu-Agriculture research institutions in India and their role in Indian Agriculture.

Reference :

1. Hussian.M. (1979) - Agricultural Geography, Inter India publication, New Delhi. 2.Mohamand, (1981) - Perspective Agricultural Geography, Vol. Concepts Publishing Company, New Delhi.
3. Morgan, W.B. & Munton R.J.C (1971) - Agricultural Geography, Methuen, London.
4. David Grigg (1984) - An introduction to Agricultural Geography, Hutcinson, London
5. Mohamad Shagi (2006) - Agricultural Geography, Dorling Kinderlay (India) Pvt. Ltd. - New Delhi.

PAPER - IV:

3. POPULATION GEOGRAPHY

Unit-I

Geography of Population -Definition- scope and development. - nature and content-Development if population Geography- Recent research in population geography in India-sources of population data- vital statistics- Collection of population data- Census methods-Socio-economic survey and problems.

Unit II

World population -growth- distribution- pattern and factors affecting it - India population-growth - distribution- pattern and factors controlling and population problems- theoretical issues: classical and modern theories in population growth - Malthus, Optimum Theory, Ricardo and Demographic Transition.

Unit III

Population composition: age structure- sex ratio- family and households - literacy and education-religion- caste and tribe - rural and urban - occupational structure - gender issues. Population composition of India- rural urban comparison.Population explosion and problems.

Unit-IV

Population dynamics: fertility and mortality- factors influencing fertility and mortality- fertility and mortality status in India and Tamilnadu- Migration: types- national and international migration- internal and external migrationrural urban migration- seasonal migration and associated problems in India

Unit-V

Population and development: population polices in developed and less developed countries -Human Development Index and its components - India's population polices - Population and Environment -Human healthdeceases- human rights- human rights in India- implications for the future.

Reference :

1. Beaujeau Garnier J. (1966) - Geography of Population, Longman Group, London.
2. B.N.Ghosh (1985) - Fundamentals of population geography, sterling publishing, New Delhi.
3. Clark I.(Ed.1984) - Geography & Population, Approaches - Pergamon press, Oxford.
4. Chandha, R.C (1986) - A Geography of population, Concepts, patterns, Kalyani publishers, New Delhi.
5. Trewartha G.T. (1969) - A Geography of population, World patterns, John Wiley & sons. New York.

PAPER V

1. MEDICAL GEOGRAPHY

Unit - I :

Nature, scope and significance of Medical geography. Development of medical - its distinction from medical science.Geographical factors affecting human health and diseases : Physical factors-(relief, climate, soils and vegetation),Environmental factors- (urbanization and congestion, water, air and noise,pollution and solid waste),Economic factors-(food and nutrition occupation and standard of living),Social factors- (population density, literacy, social customs and poverty).

Unit - II :

Classification of diseases: genetic, communicable and non-communicable;occupational diseases. The Concept of Nutrition and Human Health.Deficiency disorders and problems of mal-nutrition in India WHO classification of diseases, World distribution of major diseases

Unit - III :

Transmission of major diseases: cholera, malaria, tuberculosis Respiratory diseases, cardiovascular diseases, Diabetes, Hepatitis, Cancer, AIDS. Diffusion of diseases and causes for the same.

Unit - IV :

Health-care planning: International level -WHO, UNICEF, Red Cross National level-Government and NGOs, Health Care Planning and Policies ; Health care delivery system; Inequalities in health care services in India; family welfare, immunization, national disease eradication, and Health for All programmes

Unit - V :

India- Population growth and development and related health issues. Environment and diseases. Epidemic and Endemic diseases. Emerging and Reemerging Diseases, Health and Longevity. Environmental Hazards and Human Health A Global Perspectives

PAPER V
2. HUMAN AND CULTURAL GEOGRAPHY

Unit - I :

Introduction: Nature and scope of cultural geography; Components of culture; Man-environment relationship, Cultural evolution of man. Geography and culture; Major cultural realms of the world.

Unit - II :

Cultural Diversity: Bases of cultural diversity-race, religion and language. Cultural diversity in the world, cultural diversity and regionalization in India. Ethnic groups and tribal groups-in the world and in India. Races of mankind; Religions: origin, diffusion and spatial distribution Language families

Unit - III :

Population distribution: density and growth -World patterns and their determinants; India population distribution, density and growth profile, Concepts of under population and over population.

Unit - IV :

World Population composition: Population composition of India. Population movement: Major migrations of the world, Migration and cultural diffusion.

Unit - V :

Patterns of livelihood: various economic activities & cultural adaptations; agriculture, industrialization and modernization; technological changes and their geographic implications. Cultural changes in the recent age.

Suggested Readings:

1. Ahmad, Aijazuddin, Social Geography, Rawat Publication, New Delhi, 1999
2. Broek, J.C. and Webb, J.W: A Geography of Mankind, McGraw Hill, New York, 1978.
3. Crang, Mike: Cultural Geography, Routledge publicatins, London,1998.
4. De Blij. H.D. Human Geography. John Wiley and son, New York
- 5.Fellmann Jerome , Getis A and J Getis; Human Geography; Wm.C.Brown,USA,1990 6..Hazra, (ed.), Dimensions in Human Geography, Rawat Publication, Jaipur, 1997.
7. Husain, Majid; Human Geography; Rawat Publications, 1994.
8. Mahmood,Shama, An Introduction to the History of the World, Dorling Kindersley,India,2012
- 9 Massey, et.al (ed), Human Geography Today, Polity Press, Combridge, 1999.
- 10 Mukherjee, A.B. and Aijazuddin, A: India: Culture, society and Economy, Inter-India Publication, New Delhi, 1985.
11. Prakasa, Rao, V.L.S., Urbanisation in India; Spatial Dimensions, Concept Publishing Co., New Delhi 1983.
- 12.Rubenstein J.M; An Introduction to Human Geography ; McMillan, New York,1992.