

# **DEPARTMENT OF GEOGRAPHY**

## **FACULTY OF ARTS UNIVERSITY OF LUCKNOW, LUCKNOW**

### **SYLLABUS B. A. GEOGRAPHY**

#### **B.A. – I**

##### **Theory**

1. Introduction to Geography
2. Physical Geography – I  
(Elements of Geomorphology)

##### **Practical**

Cartography – I

#### **B.A.- II**

##### **Theory**

1. Physical Geography - II  
(Elements of Climatology & Oceanography)
2. Human Geography

##### **Practical**

Cartography – II

#### **B.A. –III**

##### **Theory**

1. Geography of India
2. Political Geography
3. Resource and Environment

##### **Practical**

Cartography – III

## **B.A. FIRST YEAR**

### **THEORY PAPER - 1 INTRODUCTION TO GEOGRAPHY**

#### **UNIT-I**

Introduction : Nature of Geography, objectives and relevance; place of geography in the classification of sciences; geography and others disciplines.

#### **UNIT-II**

##### **Geography : Major themes & sub-themes :**

Geography as the study of environment; man-environment relationship; ecology, ecosystems and environment; determinism, possibilism and neo determinism, Dualism in geography-systematic/regional, Physical and Human complementary.

#### **UNIT-III**

##### **Methodology**

- (i) Cartographic – Nature of cartography, scope of cartography Development of cartography; ancient, Medieval & Modern, Map : Definition, concepts, purpose, classification, Materials & tools of mapping.
- (ii) Quantitative–Frequency distribution, Kinds of frequency distribution, graphical representation of frequency distribution; mean, median and mode.
- (iii) Field work- collection of primary data through physical and socio economic surveys.

##### **Modern Techniques**

Introduction to modern techniques use of a photo and satellite imageries remote sensing as a tool for data generation and mapping, computer cartography.

#### **UNIT – IV**

##### **Geography Perspectives**

A brief historical over view of geography as discipline, recent trends in geography with special reference to India: imperatives for the future; career opportunities for geographer.

##### **Suggested Readings**

- Alber, Ronald, F. et.al. Geography & Inner Worlds; Pervasive themes in contemporary American Geography; Routledge New Jersey, 1992.
- Dikshit R. D. The Arts, Science of Geography Integrated Readings prentice Hall of India Pvt. Ltd. 1994.
- Dikshit R. D.; Geographical Thought – A Contextual History of Ideas, Prentice Hall of India Pvt. Lmt. 2000.
- Dikshit S K; Introduction to Geography, Vasundhara Prakashan Gorakhpur, 2009 (Hindi)
- Dohrs, F. E and Sommers, L.W. (eds.) Introduction of Geography, Thomas Y. Crowell Co. New York, 1967.
- Hartshorne, Richard; perspective on the nature of Geography, Rand McNally and co. Chicago, 1959.
- Harvey, David : Explanation in Geography, Edwards-Arnold, London 1972.
- Hussain Majid., Evaluation of Geographical Thought, Rawat Publication, Jaipur, 1980.
- James, P. E.; All Possible worlds : A history of Geographic- ideas, , Sachine Publication, Jaipur, 1980.
- Johnston R. J. and Claval, P. (end.) : Geography since the second world war, Croom Helm London Bernes and Nabole, N. J., 1984.
- Jones, P. A Fieldwork in Geography, Longmans, 1968.
- Lownsbury, J. F. and Aldrich, F. T. Introduction to Geographical Methods and Techniques, Charles Merrill, Columbus, 1979.
- Minshull, R.; The Changing Nature of Geography, Hutchinson University Library, London, 1970.
- Wooldriffs. S. W.; The Geographer As Scientist, Thomas Nelson and Sons Ltd. London, 1956.

## ***THEORY-2 PHYSICAL GEOGRAPHY-I (ELEMENTS OF GEOMORPHOLOGY)***

### **UNIT-I**

The nature and scope of Physical geography; Inter- relation of physical Geography with other branches of earth sciences; the place of geomorphology in Physical Geography; Geological time scale.

### **UNIT-II**

Earth's interior, Wegener's theory of continental Drift; plate Tectonics Earth movements– orogenic and epeirogenic. Isostasy, earthquakes and volcanoes. Rocks-origin and composition of rocks; weathering; formation of regolith and soils; rocks and relief.

### **UNIT-III**

Geomorphic agents and processes; erosion; transportation and deposition; mass wasting; Evolution of landscape; concepts of cycle of erosion, interruptions of cycle of erosion, fluvial, Arid, Glacial, Karst and Coastal landscapes.

### **UNIT-IV**

Application of geomorphology of human activities; settlements transport, land-use, mining; resource evaluation; environmental hazards and assessment.

### **Suggested Readings**

- Dayal, P.; A Text book of Geomorphology, Shukla Book Depot, Patna, 1996.
- Dury. G. H.. The Face of the Earth, Penguins, 1980.
- Ernst, W.G. Earth systems-process and Issues, Cambridge University Press, 2000.
- ICSSR: A Survey of Research in Physical Geography, Concepts New Delhi, 1983.
- Kale V and Gupta, A : Element of Geomorphology oxford University Press, Calcutta, 2001.
- Monkhouse. F. J. Principal of Physical Geography Hodder and Stoughton London, 1960.
- Pitty, A Introduction to Geomorphology. Methuen London 1974.
- Sharma. H. S Tropical Geomorphology, Concepts. New Delhi. 1987.
- Singh, S Geomorphology, Prayag Pustakalaya, Allahabad, 1998.
- Small. R. J. The Study of Landforms, McGraw Hill New York, 1985.
- Sparks, B. W Geomorphology, Longmans, London, 1960.
- Strees, J. A The Unstable Earth, Some recent views in Geography, Kalyani Publishers.
- Strahler. A. N. Environmental Geo-Science, Hamilton, Publishing Santa Barbara, 1973.
- Strahler, A. N. cmd Strahler, A. H.; Modern Physical Geography; John Wiley & sons Revised edition, 1992.
- Summerfield , M. A Global Geomorphology, Longman, 1991.
- Thornbury, W.D. Principles of Geomorphology, Longman, 1991.
- Wooldrige, S W and Morgan R. S The Physical Basis of Geography – An Outline of Geomorphology, Longman Green & Co. London, 1959.
- Wooldrigs. S. W.; The Geographer As Scientist, Thomas Nelson and Sons Ltd. London, 1956.

## **B.A. FIRST YEAR**

### **PRACTICAL CARTOGRAPHY – 1**

#### **Unit-I**

The nature and scope of cartography, scale-plain, Linear, Statement, Diagonal and comparative, Fraction- types of maps.

#### **Unit-II**

Methods of showing Relief (hachures, standing, contours and layer tints); Re presentation of different landforms by contours. Drawing of profiles; cross and long profiles, superimposed, composite and projected profiles and their relevance in landform mapping and analysis.

#### **Unit-II**

Representation of temperature, pressure and rainfall data by line (examples isotherms, isobars and isohyets): and bar graphs. Drawing of climography and hythergraphy and their interpretation – Weather maps of India publishes by Indian meteorological Department for, July and January: Interpretation of weather maps.

#### **Unit – IV**

Study of survey of India topographical maps-classification and scale. Interpretation of sol topo sheets of a hilly and a plain area of Indian in respect of (i) relief (ii) Drainage, (ii) settlement and (iv) communication pattern.

#### **Suggested Readings**

- Chauhan P R. Prayogatmak Bhoogol, Vasundhra Prakashan Gorkhpur, 2010
- Misra, R. P. and Ramesh, A Fundamentals of Cartography, McMillan Co. New Delhi, 1986.
- Pal, S. K. Statistics for Geo-scientists-Techniques and Applications, Concept, New Delhi, 1998.
- Robison, A. H. et. El.; Elements of Cartography, John Wiley & sons, U.S.A., 1995.
- Sarkar A.; Practical Geography: A Systematic Approach, Oriental Longman, Calcutta, 1997.
- Singh, R. L. and Dut, P. K.; Elements of Practical Geography, Kalyani Publishers, New Delhi, 1979.

## **B.A. – II SECOND YEAR**

### **(I) *PHYSICAL GEOGRAPHY-II* (ELEMENTS OF CLIMATOLOGY AND OCEANOGRAPHY)**

#### **A. CLIMATOLOGY**

##### **UNIT-I**

Weather and climate; definition and significance of climatology elements of weather and climate; their courses, Composition and structure of the atmosphere.

Atmospheric Temperature; Insolation and global energy budget, Vertical, Horizontal and seasonal distribution of temperature. Atmospheric pressure and winds; vertical and Horizontal distribution of pressure; planetary, periodic and local winds.

##### **UNIT-II**

Atmospheric moisture : humidity, evaporation; and condensation hydrological cycle; types of precipitation, world patterns of rainfall; regional and seasonal distribution.

Air masses and fronts; concept, classification and properties.

Atmospheric disturbances tropical and temperate cyclones : thunderstorms and tornadoes.

Climatic classification; bases of Koeppen's classification and types distribution, characteristics and related plant and animal life. Role of climate in human life; Atmospheric pollution and global warming-general causes, consequences and measures of control.

#### **B. OCEANOGRAPHY**

##### **UNIT-III**

Relevance of oceanography in earth and atmospheric sciences Definition of Oceanography.

Surface configuration of the ocean floor, continental shelf, continental slope, abyssal plain, mid-oceanic and oceanic trenches. Relief of Atlantic, Pacific and Indian Oceans. Distribution of temperature and salinity of oceans and seas.

##### **UNIT-IV**

Circulation of oceanic waters : wave, tides and currents; currents of the Atlantic Pacific and Indian oceans. Marine deposits and coral reefs; coastal environment. Oceans as storehouse of resources for the future.

#### **Suggested Readings**

- Berry, R. G & Cherley, R. J. Atmosphere, Weather and Climate Routledge, 1998.
- Critchfield, H. General Climatology, Prentice-Hall, New York, 1975.
- Das, P. K.; The Monsoons, National Book Trust, New Delhi, 1968.
- Laydolph, P., E. The climate of the Earth, Rowman and Allanheld, Totowa. J.J., 1985.
- Mather, J. R. ; Climatology, McGraw-Hill, New York, 1974.
- Patterson, S.; Introduction of Meteorology, McGraw-Hill Book Co. London, 1969.
- Stringer, E. T., Foundation of Climatology, Surjeet Publication, Delhi, 1982.
- Trewartha, G. T.; An Introduction to Climate, International Students edition, McGraw Hill, New York, 1980.
- Anikouchine, W. A Sternberg, R. W.; The World Oceans. An Introduction to oceanography Englewood cliffs, N. J. 1973.
- Gral, S. General Oceanography-An Introduction John Wiley & sons, New York, 1980.
- Garrison, T; Oceanography, Wadsworth can USA 1998.
- King, C. A. M. Beaches and Coasts, E Arnold, London, 1972.
- King, C.A.M. Oceanography for Geographers E. Arnold, London 1975.
- Sharma, R.C. Vattel M Oceanography for Geographers, Chetanya Publishing House Allahabad (1970).
- Shepard, F. P. Sumbarina Geology, Harper & sons, New York, 1948.
- Thurman, H. B : Introductory Oceanography, Charles Webber, E. Merrill Publishing co., 1984.
- Weiberg, T. and Howard : introductory Oceanography, McGraw-Hill Book Co., New York, 1976.

## **THEORY 2 HUMAN GEOGRAPHY**

### **UNIT - I**

Nature and scope of human geography. Branches of human geography concepts of man-environment relationship –determinism, Posibilism and probabilism; dichotomy in Physical and Human Geography; primitives life style of mankind and subsequent migration.

Division of mankind spatial distribution, physical and social profile of racial groups, ethnic groups, tribal groups and religious groups in the world and in India; early economic activities of mankind: food gathering, hunting, fishing and agriculture, shifting cultivation.

### **UNIT - II**

Human adaptation to the environment (i) cold region-Eskimo (ii) hot region Bushman, Bcduin; (iii) plateau –gonds, Masai (iv) Mountain Gujjars, nomads (v) regions of recurrent floods, droughts and other natural hazards; Adaptation in modern society – agricultural, urban and metropolitan;

### **UNIT - III**

Distribution of population, world distribution pattern-physical, economic and social factors influencing, spatial distribution, concepts of over population, under population and optimum population. Zero population growth; Migration internal and international Population conflicts and conflict resolution in developing world, Population theories ; Classical and Modern.

### **UNIT -IV**

Population resource regions of India: dynamic, prospective, depressed; problem of over population of Indian and remedial measures, population programmes and policy of India.

### **Suggested Readings**

- Bergwan, Edward. E.; Human Geography; Culture Connections and Lai Dscape, Prentice. Hall New Jersey, 1995.
- Carr, M. ; Patterns, process and change in Human Geography Macmillan Education, London, 1987.
- Fellniall, H. J.; Human Geography-Lands capes of Human Activities. Brown and Eenchman Pub., U.S.A 1997.
- Deblij, H. J.; Human Geography, Cultur society and space John Wiley, New York, 1996.
- Johnston, R. J. (editor); Dictionary of Human Geogrllphy, Blackwelli, oxford, 1994.
- Mc Bride, Pj.; Human Geography system, patterns and change, nelson, U.K. alld Canada, 1996.
- Michael, Can New Patterns; Process and change in Human Geography Nelson, 1997.
- Rubenstein, J. H. and Bacon, R.S. ; The Culture Landscape-an-introduction to Human Geography; prenice Hall, India, New Delhi, 1990.
- Singh, K. N.; People of India. An Introduction, Seagull Books, 1992.
- Spate O.H. K. and Learmonth A.T.A India and Pakistan Methuer, London, 1968.

## **B.A. – 2<sup>nd</sup> YEAR**

### **PRACTICAL CONTESTS**

#### **UNIT-I**

Types of cartographic symbols and their uses : (a) points (dots proportional circles and spheres) (b) Line, (Isopleths and flow lines) (c) Area (Choropleth)

Use of line and barographs for representing population agriculture industry and transport data, Representation on of population (distribution, density growth etc.) Land use cropping pattern industries & transport etc.

#### **UNIT-II**

Use of mean, median, and mode and standard Deviation in data analysis and mapping; scatter diagram-association and relationship.

#### **UNIT-III**

Map projections: general principle, classification, Drawing graticules on the following projections by graphical and mathematical methods, (i) simple cylindrical projection (ii) Cylindrical Equal Area projection (iii) Conical projection with one standard parallel (iv) conical projection with two standard parallels.

#### **Suggested Readings**

- S Statistical Methods and one Geography. Language et. 1963.
- Knem. Z. M. Text Book of Practical Geography Concept New York, 1968.
- Lawrence, G.R.P. Cartographic Methods Methuen. London, 1983.
- Monkhouse. F. J. & Wilkinson, H. R. Maps and Diagrams, Meintze London, 1994.
- Pal, S. K. Statistics for Geography,; Techniques and Applications concepts New Delhi. 1998.
- Sarkar, A K Practical Geography : A systematic Approach Orient Longman, Calcutta, 1997.
- Singh, R. L. Elements of Practical Geography, Kalyani Publication, New Delhi.
- Delhi, Steers. J. A Projections, University of London Press London.

## **B.A. – 3<sup>RD</sup> YEAR**

### **THEORY 1 : GEOGRAPHY OF INDIA**

#### **UNIT-I**

India in the context of southeast and south Asia ; India: A land of diversities, Unity within diversities.

Major terrain element of India and their role in shaping physical landscape of India. Drainage systems of India and their functional significances. The morphological regions of India.

#### **UNIT-II**

Regional and seasonal variations of climate. The monsoon, western disturbance, northwesterlies. Climatic regions of India. Soil types of India their distribution and characteristics; vegetation types and their distribution.

Forest, minerals and power resources – The status of their use and need for conservation.

#### **UNIT-III**

Spatial distribution of population and density; socio-economic implications of population explosion; urbanization, changing nature of Indian economy. Agricultural growth during the plan period, Green Revolution vis-à-vis traditional farming, rationalization of Indian agriculture, and typology of agricultural regions and their relevance in agricultural development planning.

Industrial development and Indian economy; industrial regions of India and their industrial structure, composition of domestic and international trade.

#### **UNIT-IV**

Bases of regional divisions of India-macro, meso and micro-region of India - their comparative analysis. Resource Regions of India, regional planning of rural and urban regions.

Current issues, regional concepts and population growth and the element of environment. Social and ethnic; tension, gender in equality and empowerment of women.

#### **Suggested Readings**

- Chauhan P.R.; Bharat Ka Brihad Bhoogol Vasundhara Prakashan, 2009.
- Dishpans, C. D.; India – A Regional Interpretation Northern Book Centre New Delhi, 1992.
- Farmer, B.H.; An Introduction to south Asia Methuen & Co. London, 1983
- Government of India, Reference Annual, 2001, Pub. Div. New Delhi, 2001.
- Government of India, National Atlas of India, NATMO Publication, Calcutta.
- Government of India, the Gazetteer of India Vol-I & II, Part I-A (i) and (ii) New Delhi, 1966.
- Learmonth, A.T.A. et al. (ed) Man and land of south Asia Concept, New Delhi.
- Mitra, A Levels of Regional Development India Census of India, Vol. Part 1-A (i) and (ii) New Delhi, 1967.
- Routray, J. K. Geography of Regional Disparity Asian Institute of Technology, Bangkok, 1993.
- Safi, M. Geography of South Asia Mcmillan & Co. Calcutta, 2000.
- Singh, R. L. (ed): India A Regional Geography National Geographical Society. India Varanasi, 1971.
- Spate, O.H.K. and Learmonth. A.T.A India and Pakistan-Land people and economy Methuen & Co. London, 1967.
- Valdiya, K. S. Dynamics Himalaya, University Press, Hyderabad, 1998.
- Wadia, D. N.; Geography of India. Mcmillan & Co. London, 1967.



## **THEORY- 2 : POLITICAL GEOGRAPHY**

### **UNIT-I**

- Nature, scope and subject matter of political geography; political geography and geopolitics.
- Approach to the study of political geography; morphological, functional and unified field theory.
- Role of physical, demographic, economic socio-culture and historical factors in the emergence of states.

### **UNIT-II**

- State as a politico – territorial phenomenon:
- Changing nature of location, size and shape in political geography of states.
- Political and administrative framework and its hierarchical relationship to Unitary and federal forms of governance.
- Boundaries of frontiers Functions and classification of international boundaries.

### **UNIT-III**

Global strategic views of Mackinder, Spykman ; Seversky, and Mahan and their relevance to contemporary world situation.

### **UNIT-IV**

Underdevelopment and international policies, the North-south dialogues : SAARC and ASEAN in the new International Economic order.

International tensions; identification of tension areas and factors contributing to tension in different areas; west Asia, and Indian Ocean region; Regionalism in international relations.

Geopolitical dimensions of environment

### **Suggested Readings**

- Bhagwati, J. N. (ed.); New International Economics Order The North-South Debatge. M.I.T. Press, London, 1976.
- Dikshit, R. D.; Political Geography, A Contemporary Tata Mcgraw-Hill Publishing Co. New Delhi, 1982 (also latest edition)
- Dikshit S K; Rajnitik Bhoogol – Viswvidyalaya Publication Varansi, 2010.
- Glassner. M.I. Political Geography, John Wiley, New York, 1993.
- Pankkar, K M Geographical factors in India History. Bharatiya Vidyabhavan, Bombay, 1956.
- Pounds, N. T.; Political Geography Mcgraw Hill, New York, 1972.
- Prescott. J. R : Political Geography Mcgraw Hill, New York, 1972.
- Schwartzberg Je : A Historical Atlas of South Asia, University of Chicago press. U.S.A. 1993.
- Short, J. R. ; An Introduction to political Geography; Routlege and Kegan Paul, London, 1982.
- Taylor. P. J. (ed.) Political Geography of the 20the Century – A Global Analysis, New York, 1993.
- Taylor, Peter; Political Geography, Longman, London, 1985. Analysis. New York, 1993.
- William C. H (ed.) Political Geography of the New World order Halsted Ben, New York, 1993.

## **B.A. – 3<sup>RD</sup> YEAR**

### **THEORY-3 (RESOURCE AND ENVIRONMENT)**

#### **(A) RESOURCE**

##### **UNIT-I**

Meaning, nature and components of resources and environment Resources and environment interface. Classification of resource renewable and non-renewable; biotic (forests, wildlife. Live-stock, fisheries agricultural crops) and biotic (land, Water, mineral)

##### **UNIT-II**

Distribution and utilization of water; minerals and energy resources their economic and environmental significance and conservation. Types and distribution of forests, flora, fauna and Fisheries-their economic and Environmental significance and conservation, Major soil types and their distribution; problems of soil erosion and soil consercation, Number, density, utilization.

#### **(B) ENVIRONMENT**

Emerging environmental issues-population explosion; food security; deforestation, global warming. conservation of bio-diversity and sustainable development.

#### **Suggested Readings**

- Agarwal, et. al; The Citizen's Fifth Report, Centre for Science & environmental New Delhi, 1999.
- Alexander, John, W. Economics Geography, Prentice Hall of India Ltd. New Delhi, 1988.
- Ajlen, J. L.; Students Atlas of Environmental issues duskin Publication, 1997.
- Brown, L. R. in the Human Interest, East-West press New Delhi, 1976.
- Chandna, R. C. ; A Geography of Population; Concepts, Determinants and patterns, Kalyani Publishers, New Delhi, 1986.
- Cutter, L. Renwick, H. L. Exploitation, conservation and preservation A Geographical Perspective and Natural Resources Use, Rowman and Allaheld Totowa, N. J. 1985.
- Global Environment Outlook, Earth London, 2000.
- Haggst Peter Geography – A Modern Sythesis, Harper & Row Publishers, New York, 1975.
- Janaki, V A Economics Geography. Concept Publishing Co. New Delhi, 1985.
- Liong G.C. and Nmorgen, G.C; Human & Economics Geography oxford University press. London, 1982.
- Reid, D. Sustainable Development, Earthscan pub. London, 1995.
- Sharma, H. S. Ravine Erosion in India Concept New Delhi, 1980.
- Sharma, R. S. and Chattopadhyaya, S K sustainable Developments Concepts and issues; concepts. New Delhi, 2000.
- Simmons. I. G.; The Econology of Natural Resources Edwards Arnold London, 1974.
- UNESCO : Use and Conservation of the Biosphere Paris, 1970.
- Zelinsky W.; A Prologue to Population Geography, prentice Hall, Inc. Englewood Cliffs. N. J, 1966.

### **PRACTICAL CARTOGRAPHY – III**

#### **UNIT-I**

Basic principles of land surveying (i) chain, tape, (ii) Prismatic compass (ii) Indian Clinometer, (iv) Dumpy Level, (v) Plane Table surveying (three point problem).

#### **UNIT-II**

Field work and field report/study Tour

Selected any area near the institution collect topo sheets of the area 1:50,000 scale. Visit the area identify the land form, settlements, land use features and compare the same with the topo-sheets, Draw sketches and map of the selected area; conduct field work with the help of survey instruments and incorporate the same in the final book, suggested readings same as Cartography.