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GEOGRAPHY

OUTLINE OF SYLLABUS

B.A./B.Sc. I Pass Course

	<u>Marks</u> B.A/B.Sc.	<u>Time</u>
Paper-I Introduction to Geography and Geography of India	70/100	3 Hours
Paper-II Practical	30/50	3 Hours

B.A./B.Sc. II Pass Course

Paper-I Physical Geography	70/100	3 Hours
Paper-II Practical	30/50	3 Hours

B.A./B.Sc-III Pass Course

Paper-I Human Geography and Resources and Environment	70/100	3 Hours
Paper-II Practical	30/50	3 Hours

PAPER-I INTRODUCTION TO GEOGRAPHY AND GEOGRAPHY OF INDIA

NOTE :- There will be nine questions in all, comprising of two questions from each section and one compulsory question covering the entire syllabus. Candidates are required to answer five questions in all, selecting one question from each-section and the compulsory question. The compulsory question will be short answer type of 15 to 20 words. Each question will carry equal marks.

SECTION - I

- (i) The nature of geography; objectives and relevance; place of geography in the classification of sciences: geography and other disciplines.
- (ii) Geography as the study of environment; man-environment relationships; ecology and ecosystem; environmental determinism, possibilism, neo-determinism.

SECTION - II

- (i) Use and relevance of map making techniques; statistical methods in geography (Mean, Median and Mode)
- (ii) Field work – collection of primary data through physical and socio-economic surveys; basic methods of statistical analysis of data and preparation of maps; standard deviation and co-variance.
- (iii) Introduction to modern techniques; use of air photos and satellite imagery; remote sensing as a tool for data generation and mapping.

SECTION - III

- (i) India in the context of Southeast and South Asia; India: a land of diversities; unity within diversities. Major relief regions and drainage systems of India.
- (ii) Climatic regions of India. Soil types of India – their distribution.
Minerals and power resources. Utilization and conservation of mica, iron, coal and bauxite; hydro and thermal power resources. Spatial distribution of population and density; population explosion; urbanization.

SECTION - IV

Green Revolution vis-à-vis traditional farming; production and distribution of following major crops: wheat, rice, sugarcane, cotton and tea. Industries: Cotton textile; iron and steel, sugar and automobile. Contemporary issues; regional disparity; poverty, population explosion, globalization.

SUGGESTED READINGS:

1. Deshpande C.D. India-A Regional Interpretation Northern Book Centre, New Delhi. 1992.
2. Farmer B.H. An Introduction to South Asia. Mehtuen, London, 1983
3. Govt. of India: India-Reference Annual, 2001 pub.Div, New Delhi, 2001
4. Govt. of India: National Atlas of India, NATM publication, Calcutta.
5. Govt. of India. The Gazetteer of India. Vol I & III Publication Division, New Delhi, 1965
6. Mitra, A. Levels of Regional Development India Census of India, Vol.I, Part I-A(i) and (ii) New Delhi 1967.

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7. Routray J.K. : Geography of Regional Disparity Asian Institute of Technology, Bangkok 1993.
 8. Shafi, M. : Geography of South Asia, McMillan & Co., Calcutta, 2000.
 9. Singh R.L.(ed.): India: A Regional Geography. National Geographical Society. India, Varanasi 1971.
 10. Spate, O.H.K. and Learmonth, A.T.A.: India and Pakistan-Land, People and Economy Methuen & Co., London. 1967.
 11. Valdiya, K.S.: Dynamic Himalaya, University press, Hyderabad, 1998.
 12. Wadia, D.N.: Geology of India, McMillan & Co., London. 1967
 13. Abler, Ronald F. et al Geography's Inner Worlds: pervasive themes in contemporary American Geography, Routledge New Jersey, 1992.
 14. Dikshit R.D.: The Arts, Science of Geography Integrated Readings Prentice Hall of India, New Delhi 1994.
 15. Dikshit R.D.: Geographical thought-A contextual History of Ideas. Prentice Hall of India Pvt. Ltd. 2000.
 16. Dohre, F.E. and Sommers, L.W.(ed) Introduction to Geography, Thomas Y. Crowell Co., New York, 1967.
 17. Hartshorne, Richard: Perspective on the Nature of Geography, Rand McNally and Co., Chicago, 1959.
 18. Husain, Majid: Evolution of Geographical Thought, Rawat Publications, Jaipur, 1984.
 19. James, P.E.: All possible Worlds: A History of Geographical Ideas, Sachin Publications, Jaipur, 1980.
 20. Jones, P.A.: Fieldwork in Geography, Longmans, 1968.
 21. Lownsburg, J.F. and Aldrich, F.T.: Introduction to Geographical Methods and Techniques, Charles Merrill, Columbus. 1979.

B.A/B.Sc I

Max.Marks : 30/50

Time: 3 Hours

PAPER-II PRACTICAL

Unit-I	The nature and scope of cartography. Scale: Comparative, diagonal and representative fraction. Statement of scale. Classification of maps – qualitative and quantitative (theory only).	
Unit-II	Types of cartographic symbols and their use: (a) point (b) line (c) area I. Representation of population data (density, distribution, age and Sex Pyramid) II. Representation of agricultural data (Bar diagram, Pie diagram) III. Representation of industrial and transport data: Flow line charts, location maps (Point method, Graduated circles, Geometrical symbol).	
Unit-III	Chain and Tape Survey Distribution of Marks: Exercises Practical Record Viva-Voce	B.A/B.Sc. 18/36 (Five exercises) 6/7 6/7

NOTE: The question paper shall contain five questions in all. Two questions will be from section I and II, and one question from section III. Candidates are required to attempt three questions, selecting at least one question from each section.

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B.A./B.Sc. II

Max.Marks : 70

Time : 3 Hours

PAPER - I PHYSICAL GEOGRAPHY

NOTE :- There will be nine questions in all, comprising of two questions from each section and one compulsory question covering the entire syllabus. Candidates are required to answer five questions in all, selecting one question from each-section and the compulsory question. The compulsory question will be short answer type of 15 to 20 words. Each question will carry equal marks.

SECTION - I

The nature and scope of physical geography: The place of geomorphology in physical geography; Geological Time Scale.

Earth's interior; Wegner's theory of Continental Drift; Plate Tectonics; earth movements--orogenic and epirogenic, isostasy. Earthquakes and volcanoes.

SECTION - II

Rocks--origin and composition of rocks; weathering; mass-wasting. Processes and landforms: river, glacial, wind, karst and coastal; Soil formation.

Evolution of landscape--concept of the cycle of erosion. Application of geomorphology to human activities -- settlements, transport and landuse.

SECTION - III

Weather and climate; elements of weather and climate and their causes. Composition and structure of the atmosphere. Atmospheric temperature, insolation, vertical, horizontal and seasonal distribution of global temperature. Atmospheric pressure and winds: vertical and horizontal distribution of pressure; planetary and local winds. Atmospheric moisture -- humidity, evaporation and condensation; hydrological cycle; types of precipitation; world pattern of rainfall. Air masses; concept and classification. Atmospheric disturbances: tropical and temperate cyclones.

SECTION - IV

Surface configuration of the ocean floors, continental shelf, continental slope, abyssal plain, mid-oceanic ridges and oceanic trenches. Distribution of temperature and salinity of oceans and seas. Circulation of oceanic waters -- currents of the Atlantic, Pacific and Indian Oceans. Oceans as storehouse of resources for the future.

SUGGESTED READINGS:-

1. Dayal : F.A Text book of Geomorphology, Shukla Book Depot, Patna, 1996.
 2. Ernst W.G. Earth Systems process and Issues Cambridge University press, 2000.
 3. Kale V. and Gupta, A Element of Geomorphology Oxford University press, Calcutta, 2001
 4. Monkhouse. F.J.: Principles of physical Geography. Hodder and Stoughton, London, 1960.
 5. Pitty A.: Introduction to Geomorphology Methuen, London. 1974
 6. Sharma. H.S.: Tropical Geomorphology, Concept, New Delhi, 1987
 7. Singh. S.: Geomorphology Prayag pustakalaya, Allahabad, 1998.
 8. Strahler A.N.: Environmental Geo-Science, Hamilton Publishing Santa Barbara. 1973.
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9. Strahler A.N. and Strahler A.H.: Modern Physical Geography; John Wiley & Sons, Revised edition 1992.
 10. Summerfield, M.A.: Global Geomorphology, Longman, 1991
 11. Thornbury, W.: Principles of Geomorphology, Wiley Eastern, 1969.
 12. Wooldridge, S.W. and Morgen, R.G.: The physical basis of Geography- An outline of Geomorphology, Longman Green & Co., London, 1959.
 13. Barry, R.G. & Chorley, R.J. Atmosphere, Weather and Climate, Routledge, 1998.
 14. Critchfield, H.: General Climatology, prantice-Hall, New York, 1975.
 15. Mather, J.R.: Climatology, McGraw-Hill, New York, 1974.
 16. Stringer, E.T.: Foundation of Climatology, Surjeet publications, Delhi, 1982.
 17. Trewartha, G.T.: An Introduction to Climate, International Students edition, McGraw-Hill, New York, 1981.
 18. Garrison, T. Oceanography Wadsworth co., USA, 1998.
 19. King, CAM: Oceanography for Geographers E. Arnold, London, 1975.

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B.A/B.Sc. II

Max.Marks : 30/30

Time : 3 Hrs.

PAPER - II PRACTICAL

SECTION - I (Exercises 12)

Methods of showing relief (hachures, shading contours and layer tints); representation of different landforms by contours. Drawing of profiles: cross and (superimposed, composite and projected) and long profiles and their relevance in landform mapping and analysis.

SECTION - II (Exercises 10)

Representation of temperature, pressure and rainfall data by line (examples isotherms, isobars and isohyets) and bar graphs. Drawing of climograph and hythergraph and their interpretation. Weather maps of India published by Indian Meteorological Department for July and January and their interpretation.

SECTION - III (Exercises 3)

Plane Table Survey: Radiation, intersection and traverse method.

Distribution of Marks	:	B.A/B.Sc.
Exercises	:	18/36
Practical record	:	6/7
Viva-voce	:	6/7

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SUGGESTED READINGS:-

1. Misra, R.P. and Ramesh, A. Fundamentals of Cartography, McMillan Co., N.Delhi, 1986.
2. Pal, S.K. Statistics for Geoscientists-Techniques and Applications, Concept, New Delhi, 1998.
3. Robinson, A.H. et al: Elements of Cartography, John Wiley & Sons, USA, 1995.
4. Sarkar A.K: Practical Geography: A Systematic Approach, Oriental Longman, Calcutta, 1997.
5. Singh, R.L. and Dutt, P.K.: Elements of Practical Geography, Kalyani publishers, New Delhi, 1979.

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B.A./B.Sc. III

Max.Marks : 70
Time : 3 Hrs.

PAPER - I HUMAN GEOGRAPHY AND RESOURCES AND ENVIRONMENT

NOTE :- There will be nine questions in all, comprising of two questions from each section and one compulsory question covering the entire syllabus. Candidates are required to answer five questions in all, selecting one question from each-section and the compulsory question. The compulsory question will be short answer type of 15 to 20 words. Each question will carry equal marks.

SECTION - I

Nature and scope of human geography. Branches of human geography. Concept of man-environment relationships.

Division of mankind; spatial distribution of races and tribes of India; early economic activities of mankind – food gathering, hunting, fishing and vegiculture, shifting cultivation.

SECTION - II

Human adaptation to the environment (i) cold region - Eskimo, (ii) hot region-Bushman, (iii) plateau-Gonds, (iv) Mountains - Gujjars. Distribution and world pattern of population – concepts of over population, under population and optimum population. Population theories; Malthusian and Recardo.

SECTION - III

Meaning, nature and components of resources and environment.

Classification of resources – renewable and non-renewable; biotic (forests, wild-life, live-stock, fisheries, agricultural crops) and abiotic (land, water, mineral).

Distribution, utilization and conservation of biotic (flora and fauna) and abiotic (water; minerals and energy resources).

SECTION - IV

Number, density and growth of population; population pressure and environmental degradation.

Classification of environment – natural and human. Man-environment inter-relations with respect to population size. Types of economy and technology of development. Degraded and sustainable development.

SUGGESTED READINGS :-

1. Bergwan, Edward E: Human Geography: Culture, Connections and landscape, Prentic-Hall, New Jersey, 1985.
2. Carr, M. Patterns, Process and change in Human Geography, McMillan Education, London, 1987.
3. Fellman, J.L.: Human Geography-Landscapes of Human Activities. Brown and Benchman, Pub., USA 1997.
4. DeBlij H.J.: Human Geography, Culture, Society and Space John Wiley, New York, 1996.
5. McBride, P.J.: Human Geography Systems, patterns and change, Nelson, U.K. and Canada, 1996.
6. Michael, Can: New Patterns: Process and Change in Human Geography Nelson, 1997.
7. Agarwal, A. et. al: The Citizen's Fifth Report. Centre for Science & Environment, New Delhi 1999.

8. Alexander, John, W.: Economic Geography, Prentice Hall of India Ltd., New Delhi 1988.
9. Chandna, R.C.: A Geography of Population: Concepts, Determinants and patterns, Kalyani publishers, New Delhi, 1986.
10. Global Environment Outlook Earthscan, London 2000.
11. Hagget, Peter: Geography-A Modern Synthesis, Harper & Row Publishers, New York, 1975.
12. Janaki, V.A.: Economic Geography, Concept publishing Co., New Delhi, 1965.
13. Reid, D.: Sustainable Development, Earthscan pub., London, 1995.
14. Sharma, H.S. and Chattopadhyaya, S.K.: Sustainable Developments-Concepts and issues, Concept, New Delhi, 2000.
15. UNESCO: Use and Conservation of the Biosphere. Paris, 1970.

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B.A./B.Sc.-III

Max. Marks: 30/30

Time : 3 Hrs.

PAPER - II CARTOGRAPHY (PRACTICAL)

SECTION - I

Use of Mean, Median and Mode, and Standard deviation in data analysis and mapping-scatter diagram-association and relationship.

SECTION - II

Map Projections: general principles, classification, Drawing graticules on the following projections by graphical and mathematical methods: (a) Cylindrical (b) Conical (c) Zenithal (d) Conventional. At least two exercises from each.

SECTION - III

Prismatic compass survey by radiation, intersection, open traverse and close traverse methods.

Distribution of Marks	B.A/B.Sc.
Exercises	12/24
Field Work	6/6
Practical record	6/10
Viva-Voce	6/10

SECTION - IV

Field work and Field Report: Select any area near the institution for compiling data of agriculture, urban, industrial or transport activity. The field report will be based on primary survey through questionnaire or field investigation.

NOTE :- The question paper shall contain five questions in all, comprising of two questions from section I and II each, and one question from section III. Candidates are required to attempt three questions, selecting at least one question from each section.

SUGGESTED READINGS :-

1. Gregory S: Statistical Methods and the Geographer, Longman, London, 1965.
2. Khan, A.A.: Text Book of Practical Geography, Concept, New Delhi, 1996.
3. Lawrence, G.K.P.: Cartographic Methods, Methuen, London, 1968.
4. Monkhouse, F.J. and Wilkinson, H.R.: Maps and Diagrams, Methuen, London, 1994.
5. Pal, S.K. Statistics for geoscientists- Techniques and Applications, Concept, New Delhi, 1998.
6. Sarkar, A.K.: Practical Geography-A Systematic Approach, Orient Longman, Calcutta, 1997.
7. Singh, R.L.: Elements of Practical Geography, Kalyani pub. New Delhi.
8. Steers, J.A: Map projections, University of London Press, London.