Syllabus for BA/B.Sc Subject: Geography (Elective Course)

SEMESTER – I

Paper: ET-5-GEO- 101: PHYSICAL GEOGRAPHY (PART - I) L-4, T-1, P-0

Course Contents: Unit – I: Geomorphology Lecture Hours- 35 1. Definition, nature and scope of Geomorphology. 2. Major landforms of the earth: plains, plateaus and mountains. 3. Geomorphic processes; weathering and erosion. 4. Earth’s movements: orogenic and epeirogenic. 5. Earthquakes and volcanoes. 6. Earth’s interior; Wegener’s continental drift theory.

Unit – II: Climatology Lecture Hours- 25 1. Weather and climate: Definition, elements and factors. 2. Atmospher ic temperature: Horizontal and Vertical distribution; Insolation and heat budget. 3. Atmospheric Pressure; Global pressure System and wind belts. 4. Concept of airmasses and fronts; the classification; cyclones and anticyclones.

Unit – III: Oceanography Lecture Hours- 20 1. Bottom configuration of Atlantic, Pacific and Indian Oceans. 2. Salinity and composition of sea water. 3. Ocean currents: Atlantic, Pacific and Indian Oceans. 4. Ocean deposits.

RECOMMENDED TEXT BOOKS AND REFERENCE BOOKS:

1. Singh,S.: Geomorphology. 2. Gautam,A.: Geomorphology. 3. Singh,S.: Physical Geography. 4. Lal.D.S.: Climatology. 5. Lal,D.S.: Oceanography. 6. Strahler,A.N. 1969: Physical Geography, 3rd Edition, Wiley International.

7. Ahmed,E.,1985: Geomorphology, Kalyani Publisher, New Delhi. 8. Lal, D.S.: Phsical Geography.

GEOGRAPHY (ELECTIVE)

**SEMESTER-II**

**Total Marks : 75**

**Paper Code : ET-5-GEO-201**

**PHYSICAL GEOGRAPHY (PART-II)**

**Course Contents:**

**Unit – I: Environmental Issues Lecture Hours- 25**

**Environment: Natural and Human; man-environment relationship.**

1. Emerging environmental issues; environmental degradation, pollution, global warming and climate change.
2. Environmental management: concept and utility; environmental impact assessment.

**Unit – II: Ecological concept Lecture Hours- 20**

 1. Ecology and Ecosystem: meaning; structure and functioning of ecosystem.

2. Concept of biodiversity; need of conservation of biodiversity.

3. Concept of sustainable development.

**Unit – III: Biogeography Lecture Hours- 35**

1. Biogeography: definition, scope and significance.

2. World distribution of plants and animals.

3. Biomes-Forest,Grassland, Desert and Mountain.

4. Soils: Definition; soil forming processes.

5. Classification and distribution of soil; soil erosion and conservation.

6. Major soil types with special reference to India and Assam.

**RECOMMENDED TEXT BOOKS AND REFERENCE BOOKS:**

1. Singh,S.: Environmental Geography, Prayag Pustak Bhawan, Allahabad.

2. Gautam,A.: Environmental Geography, DVS Publication, Ghy.

3. Mahanta,A.P.: Biogeography.

4. Bhattacharyy,N.N.:Biogeography

5. Robinson,H.:1982:Biogeography, ELBS, Mc Donald & Evans, London.

6. Hussain,H(ed), 1994.: Biogeography (part I & II), Anmol Publications, New Delhi.

7. Smith,R.L.: Ecology of Man- An Ecosystem Approach.

8. Chandna,R.C.: Environmental Geography, Kalyani Publishers, New Delhi

SEMESTER – III

Paper: ET-3-GEO-303: HUMAN GEOGRAPHY AND POPULATION GEOGRAPHY L-2, T-1, P-0

Course Contents: Unit – I: Human Geography Lecture Hours- 24 1. Human Geography; Definition, Nature and Scope. 2. Two main school of Human Geography- Environmental Determinism and Possibilism. 3. Classification and spatial distribution of human races.

Unit – II: Population Geography Lecture Hours- 24 1. Population growth and distribution. 2. Migration: Causes and Consequences. 3. Types of settlement; pattern of rural settlement; functional classification of towns.

RECOMMENDED TEXT BOOKS AND REFERENCE BOOKS:

1. Hussain,M.: Human Geography, DVS Publishers, Ghy. 2. Chandna,R.C.: Population Geography. 3. Negi,B.S.: Human Geography. 4. Singh,L.R.: Fundamentals of Human Geography. 5. Ghosh,B.N.: Fundamentals of Population Geography, Sterling Publishers Pvt. Ltd. New Delhi. 6. Hassan, Md. Izhar.: Population Geography, Rawat Publication, New Delhi. 7. Gautam,A.: Human Geography. 8. Khan,N.: Introducing Human Geography, DVS Publishers, Ghy. 9. Austin,M.: Human Geography, DVS Publishers, Ghy.

 Paper: EP-2-GEO-304: TOPOSHEET AND PROFILE DRAWING & CLIMATIC DATA STUDY L-0, T-0, P-2 Course Contents: Unit – I: Study of Toposheet and Profile Drawing Lecture Hours- 40 1. Interpretation of Toposheets. 2. Preparation of transarct charts. 3. Drawing of profiles: serial and superimposed profiles, projected, composite and interpolation. Unit – II: Climatic Data Study Lecture Hours- 24 1. Drawing of climograph and hythergraph. 2. Preparation of line graph and bar graph. 3. Weather map interpretation-summer and winter.

RECOMMENDED TEXT BOOKS:

1. Singh,R.L.: Fundamentals of Practical Geography, DVS Publication, Ghy. 2. Singh,G.: Map Work and Practical Geography, DVS Publication, Ghy. 3. Robinson,: Elements of Cartography, DVS Publication, Ghy.

GEOGRAPHY (ELECTIVE)

**SEMESTER-IV**

**Total Marks : 60**

**Paper Code : ET-3-GEO-401**

**REGIONAL GEOGRAPHY OF INDIA**

**Course Contents:**

**Unit – I: Physical Frame Work Lecture Hours- 20**

1. India:Introduction; Geology and Physiographic divisions.

2. Drainage system and Climate.

3. Soil and Natural Vegetation.

**Unit –II: Economic Characteristics and Population Lecture Hours- 16**

1. Agriculture; major crops – paddy, wheat, cotton, sugarcane, tea.

2. Major minerals and power resources: iron ore, copper, aluminium, and coal, petroleum, natural gas

 and hydro power.

3. Industries: Iron and steel, Cotton textiles, chemicals.

4. Transport and Communication.

5. Population: growth and distribution.

 **Unit – III: North-East India Lecture Hours- 12**

1. Physiography, climate, soil and Natural vegetation.

2. Major mineral and power resources, transport and and communication systems.

3. Agriculture: major crops- production and distribution.

4. Economic problems of North-East India.

**RECOMMENDED TEXT BOOKS AND REFERENCE BOOKS:**

1. Singh, R.L(ed): A Regional Geography of Indi,1967.
2. Tiwary, R.C.: Geography of India, Prayag Pushtak Bhawan.
3. Khullar : India A Comprehensive Geography, Kalyani Publisher.
4. Taher, Md & Ahmed: North East India.
5. Bhattacharya, N.N.: North East India: A Systematic Geography.
6. 6. Taher & Ahmed: Assam : A Geographical Profile. 7. Bhagawati, A.K et al: Geography of Assam, 2000 Publication of NEIGS. 8. Sutta, A.K. India; Resources, Potentialities and Planning, 1973. 9. Guha and Chattaraj: A New Approach to Economic Geography.

 Paper: EP-2-GEO-406: MAP PROJECTION AND SURVEYING L-0, T-0, P-2 Course Contents: Unit – I: Projection: Drawing of graticules of the following projections. Lecture Hours - 34 1. Polar Zenithal Gnomonic 2. Polar Zenithal Stereographic 3. Polar Zenithal Orthographic 4. Conical Projection (one standard parallel) 5. Cylindrical equal area

Unit – II: Surveying Lecture Hours- 30

1. Basic concepts 2. Plain table survey 3. Prismatic compass survey

RECOMMENDED TEXT BOOKS:

1. Singh, R.L.: Fundamentals of Practical Geography, DVS Publication, Ghy. 2. Singh, G.: Map work & Practical Geography, DVS Publication, Ghy. 3. Kanetkar and Kulkarni: Surveying and leveling Part-I 4. Singh,R.L.: Elements of Practical Geography, DVS Publication, Ghy.

SEMESTER – V

Paper: ET-5-GEO-507: ECONOMIC GEOGRAPHY L-4, T-1, P-0 Course Contents: Unit – I: Introduction Lecture Hours- 50 1. Economic Geography: Introduction. 2. Economic activities in plains and hills of NE India. 3. Economic versus environmental problems. 4. Natural resources and their classification. 5. World distribut of Iron, coal, petroleum, gold, copper, aluminium. 6. Hydro-electricity in North-East India – prospects and problems.

Unit – II: Industries Lecture Hours- 30 1. Industry: Types. 2. Location factors of iron and steel industries, cotton textiles and chemical industries. 3. World distribution of rice, wheat, tea, coffee, cotton, jute and rubber.

RECOMMENDED TEXT BOOKS AND REFERENCE BOOKS:

1. Guha, J.L & Chattarj, P.R 1999,(new edition): A new Approach to Economic Geography. 2. Gautam, A.: Advanced Economic Geography. 3. Hussain, M.: Agricultural Geography. 4. Singh and Dhillon: Agricultural Geography. 5. Raza, M. and Agarwal, Y: Transpport Geography of India. 6. Mitchell, B.: Geography: An Resource Analysis. 7. Hartshorne, T.N. & Alexander, J.W.: Economic Geography, Prentice Hall, New Delhi. 8. Choudhari, M.R. 1970, Indian Industries, Development and Location, Oxford. 9. Das Gupta, A Economic & Commercial Geography. 10. Smith, D.M.: An Economic Geographical Analysis.

Paper: EP-2-GEO-508: STATISTICAL METHODS AND CARTOGRAMS L-0, T-0, P-2 Course Contents: Unit – I: Statistical Methods Lecture Hours- 32 1. Measures of Central Tendency- mean, median and mode. 2. Measures of dispersion- mean deviation and standard deviation.

Unit – II: Cartograms Lecture Hours- 32 1. Pie diagram, bar diagram, histogram, frequency curve. 2. Population map by dot method, density and literacy by shade method (data from India and NE India).

RECOMMENDED TEXT BOOKS:

1. Singh, R.L.: Fundamentals of Practical Geography, DVS Publication, Ghy. 2. Singh, G.: Map work & Practical Geography, DVS Publication, Ghy. 3. Mahmood, A.: Statistical Methods in Geography. 4. Singh,R.L.: Elements of Practical Geography, DVS Publication, Ghy.

SEMESTER – VI

Paper: ET-5-GEO-609: REGIONAL GEOGRAPHY OF THE WORLD L-4, T-1, P-0 Course Contents: Unit – I: Asia Lecture Hours- 40

1. Phisiography, Soil, Climate, Vegetation, Minerals and agricultural resources, Major Industries. 2. Distribution of Population.

Unit – II: Europe Lecture Hours- 40

1. Phisiography, Soil, Climate, Vegetation, Minerals and agricultural resources, Major Industries. 2. Distribution of Population.

RECOMMENDED TEXT BOOKS:

1. Manku, D.S.: A Regional Geography of World, Kalyani Publishers. 2. Gautam, A: World Geography, Sarda Pushtak Bhawan, Allahabad. 3. Bradshaw, M: World Regional Geography. 4. Gourou,P.(1980): The Tropical World, Longman, London. 5. Cole, J.(1996): A Geography of worlds Major Regions, Routledge, London. 6. Jackson, R.H. et. al.(1991): World Regional Geography- Issues for today.

Paper: PR-2-GEO-610: PROJECT REPORT L-0, T-0, P-2 Course Contents: Unit – I: Field Report 1. Field Study: Preparation of a Report on the basis of the data collected from field study (Socio-Economic, Environmental and Physical study).