STATE LEVEL UNDERGRADUATE SYLLABI
(with Minor Changes approved by Board of Studies, Geography,
(meeting held on 12.07.2011)
M.J.P. Rohilkhand University, Bareilly)
B.A./B.Sc.

GEOGRAPHY

The three year B.A./B.Sc. course in geography shall be spread over three Academic Sessions viz. Part – I, Part – II, Part – III. There will be two theory papers carrying 75 marks each and a Practical of 50 marks in the first two years. In Part – III, there will be three theory papers carrying 50 marks each and a Practical of 50 marks.

The candidates must pass in theory and Practicals separately at least 36 percent marks in each. No private candidate is allowed. Failed candidates shall not be required to undergo practical training. They might submit the old Record Book or a new one.

Class-wise Schedule of papers is as follows –

B.A./B.Sc. Part – I
Paper – I Physical Geography M.M. 75
Paper – II Human Geography M.M. 75
Practicals M.M. 50

B.A./B.Sc. Part – II
Paper – I Economic Geography M.M. 75
Paper – II Geography of India M.M. 75
Practicals M.M. 50

B.A./B.Sc. Part – III
Paper – I Geographical thought M.M. 50
Paper – II Environmental Studies M.M. 50
Paper – III Regional studies of any one of the following
(A) South West Asia
(B) South East Asia
(C) Far East Asia
Practicals M.M. 50
B.A./B.Sc. Part – I
Paper – I: Physical Geography
Course Contents:


Part - V Biosphere: Components of Biosphere, Plants and animals evolution, dispersal and distribution: Biotic succession, Biome types and Zoo-geographical regions of the world, Biosphere as a global Eco-system.

Books Recommended:
3. Trewartha, G.T. Elements of Physical Geography.
4. Pears, N: Basis Biography.
5. Sharma, R.C. and Hukku, M: Oceanography for Geographers,
6. Singh, Savindra: Physical Geography (Eng./Hindi)
7. Lal, D.S.: Climatology (Eng./Hindi)
8. Singh, J. and Singh, K.N. Bhautik Bhoogol (Hindi)
Paper – II: Human Geography

Unit - I  **Concept and Nature:** Meaning, Scope and Development of Human Geography, Man and Environment relationship - Determinism, Possibilism, Neo-determinism, Probabilism, Basic principles – Principle of Activity or Change, Principle of Terrestrial Unity or whole.

Unit - II  **Habitation (Population and Settlement)**
Distribution of population and world pattern, global migration – causes and consequences, concept of over population and under population.

**Human Settlements** – Origin, types (Rural-Urban) characteristics, size and distribution. House types and their distribution with special reference to India.

Unit - III  **Economy - Evolution of Human Economy:** Sequences of human occupancy, Primitive Economics – Food gathering, Hunting, Pastoral herding, Fishing, Lumbering and Primitive agriculture. Later major innovations and their impact.

Unit - IV  **Society and Culture:** Evolution of man (Australopithecus, Homo Erectus, Homosapiens. Man’s spread over the earth during the Pleistocene) cultural Diffusion, Cultural realms, World Human Races – Classification, Characteristics and Distribution.

Unit - V  **Population Tribes:** Some typical modes of life of world Tribes- Eskimos, Kirghiz, Bushman, Masai, Semang and Pygmies. Habitat, Economy and Society of Indian Tribes – Bhotias, Gaddis, Tharus, Bhil, Gond, Santhal, Nagas (with reference to their present-day transformation)

**Books Recommended:**
2. Thomas, W.L. (ed.) Man’s Role in Changing the Face of the Earth.
3. Peripillou, Human Geography.
5. Forde, C.D., Habitat, Economy and Society.
7. Kaushik, S.D., Manav Bhoogol (Hindi)
9. Prasad, Gayatri, Sanskritik Bhoogol (Hindi)
10. Singh, J., Manav Bhoogol (Hindi)
11. Bansal, S.C., Manav Bhoogol (Hindi)
PRACTICALS

(A) Lab Work

Unit - I The nature and scope of cartography, Scales – Construction of Comparative, Diagonal and Vernier scales, Enlargement and Reduction of maps. Calculation of area of maps of different shapes by graphical and arithmetical methods.

Unit - II Map Projections: General Principles: Classification, properties and choice of map projections- merits and demerits. Construction of Cylindrical Equal area, Mercator’s. Conical with two Standard Parallels, Bonne’s, Polyconic, Gnomonic Polar Zenithal and Stereographic Polar Zenithal projections.

Unit - III Methods of showing relief: Hachures, shading, contours & layertints; representation of different landforms by contours, Drawing of profiles – cross & long profiles, super imposed, composite & projected profiles. Slopes & gradients.

Unit - IV Topographical Maps
Introduction: Expansion and Indexing: Coverage, Scale and Topo Symbols. Study and Interpretation of One Inch/1:50,000 Survey of India Toposheets – representing Plain, Plateau and Mountain areas under the following heads – Relief, Drainage Characteristics, Land-use, Settlement types and patterns, and means of Transport and communication with special reference to recognition of Land forms based on contours and profiles drawn on them.

DIVISION OF MARKS:

Lab Work-One question from each unit with internal.
Choice (Duration – Three Hours) 40
Viva-Voce & sessional records 10

Books Recommended:
5. Singh, L.R. & Singh, R.N. Map work and Practical Geography (Eng./Hindi)
7. Lal Hira: Prayogatmak Bhoogol Ke Adhar (Hindi)
8. Tiwari, R.C.; Tripathi, Sudhakar, Abhinav Prayogic Bhoogol.
B.A./B.Sc. Part – II

Paper – I: Economic Geography


Unit - II  Soil and major soil types, Forest types and their products. Agricultural land use and Locational theory by Von Thunen; Distribution production and international trade of principal crops-rice, wheat, sugarcane, cotton, tea, coffee and rubber, Agricultural regions of the world by Whittlesey.

Unit - III  Marine resources and Aquaculture – Major, Fishing Areas, their production and trade. Nature of Occurrence, distribution, production and trade of minerals-iron ore, Manganese, Bauxite, Copper, Mica and Gold (in major producing countries) Power Resources - Production and utilization of coal, Petroleum, Hydroelectricity and atomic energy.


Unit - V  Means and modes of transport-major trans continental railways, International Air and Sea routes; inland water ways (Panama and Suez Canals); Changing pattern of international Trades, Major Trade organizations and trade blocks COMECON, EFTA, ASEAN, NAFTA, OPEC – their objectives and trade relations.

Books Recommended:
1. Allexander, J.W., Economic Geography.
7. Singh, K.N. & Singh, J., Arthik Bhoogol ke Mool tatva (Hindi)
8. Jain, P.: Arthik Bhoogol ki Samiksha (Hindi)
Paper – II: Geography of India

Unit - I  India in the context of Asia and the world: Structure, Relief and Drainage System; Major Physiographic regions of India; The Indian Monsoon-origin and characteristics, effect of El Nino, climatic division, Soil types and conservation.

Unit - II  Forest resources their utilization and conservation; Power resources (water, Coal, Mineral oil and Atomic) and Mineral resources (Iron ore, Bauxite, Mica, Manganese) their reserve, distribution, production, trade and conservation. River Valley Projects; Tehri dam & Narmada Valley.

Unit - III  Indian Economy: Agriculture – main characteristics and problems of Indian agriculture; Irrigation, mechanization and Green Revolution; post revolution scenario-recent trends; Major Agricultural regions. Industries – Locational factors; development and spatial pattern of major industries (Iron and Steel, Textiles, Cement, Sugar, Paper, Oil Refinery and Fertilizers) Major Industrial regions/complexes.


Unit - V  Regional development & disparities after independence; Major issues and planning of some problem areas – Flood prone areas, Drought prone areas and Tribal areas. Detailed geographical study of Gangetic Plain with special reference to Rohilkhand Region.

Books Recommended:
4. Mitra Ashok, Levels of Economic Development of India.
5. Singh, J., India – A Comprehensive Systematic Geography.
7. Verma, R.V. Geography of India (Hindi).
8. Bansal, S.C., Geography of India (Hindi)
9. Gopal Singh, Geography of India.
10. Ramamurti, Geography of India Systematic.
11. Tiwari, R.C., Geography of India
PRACTICALS

(A) Lab Work

(ii) Graphical Representation of Statistical Data-Histogram, Polygon, Frequency Curve, Scatter Diagram.

Unit - II Cartographic Representation of Statistical Data
(i) Graphs: Band graph, Hythergraph, Climograph.
(ii) Diagrams: Compound Bar, Wheel, Rectangle, Circle.

Unit - III Weather Maps: Use of weather instruments and weather symbols (India) Study and Interpretation of Indian daily Weather maps/reports especially of January, March, July and October, Weather forecasting.

Unit - IV Aerial Photogrammetry and Remote Sensing
Terminology, meaning and scope of Remote Sensing. Types and characteristics of aerial photographs, Determination of scales, Image characteristics – Tone, Shadow size, Pattern and their identification.

(B). Viva-Voce & Sessional Records

DIVISION OF MARKS:

(A). Lab Work-One question from each unit with internal.
Choice (Duration – Three Hours)  40
Viva-Voce & sessional records  10

Books Recommended:
2. Robinson, A.H., Elements of Cartography.
6. Singh, L.R. & Singh, R.N. Map work and practical Geography (Eng./Hindi)
7. Sharma, J.P., Prayogatmak Bhoogol Ki Rooprekha (Hindi)
8. Hira Lal, Prayogatmak Bhoogol Ke Adhar (Hindi)
9. Singh, J. et. al. Bhaumikiya manchitro ki Rooprekha (Hindi)
10. Lal, Hira, Matratmak Bhoogol (Hindi)
B.A./B.Sc. Part – III

Paper – I: GEOGRAPHICAL THOUGHT

Unit - I  The field of geography; its place in the classification of sciences; geography as a selected concepts of geography - distributions; relationships, interactions, area differentiation and spatial organization.

Unit - II  Dualisms in geography; systematic & Regional geography; physical & human geography. Systematic geography & its relation with systematic sciences and with regional geography. The myth and reality about dualism.

Unit - III  Geography in ancient period – Contribution of Indian, Greek & Roman geographers, Geography in middle age – Arab geographers, Renaissance period in Europe. Renowned travellers and their geographical discoveries.

Unit - IV  German school of thought – Kant, Humboldt, Ritter, Richthofen, Ratzel, Hettner, French school of thought – Contribution of Blache & Brunhes.

Unit - V  Soviet geographers, American school – Contribution of Davis, Sample, Huntington & carl sauer, British school – Contribution of Mackinder, Herbertson & L.D. Stamp.

Books Recommended:
Paper – II: Environmental Studies

Unit - I Geography as a study of Environment - concepts & components of environment, Development of environment studies, Approaches to environmental studies, concept of ecology and ecosystem. Man-Environment relationship, Agricultural and Industrial practices, science, technology and environment.

Unit - II The problems and causes of environmental degradation, Deforestation, soil erosion, soil exhaustion, Desertification, Air pollution, water pollution, Disposal of solid waste, Population pressure.

Unit - III Environmental management: Environmental education, preservation of ecological balance at local, regional and National level, Major environmental policies and programmes.

Unit - IV Sample studies – Ganga Action Plan, Tiger project, Tehri dam & Narmada Valley project.

Unit - V Emerging environmental issues; population explosion, food security, global warming, bio-diversity and its conservation, sustainable development.

Books Recommended:
2. P.S. Negi. Eco-Development and Environmental Geography (Hindi)
4. V.K. Srivastava, Environmental and Ecology (Hindi).
5. Griffith Taylor, Environmental race and migration.

Paper – III: 
Regional Studies of any one of the following Regions

(A) South West Asia

Unit - I Region as a geographical entity and as a component of global system. Basis of regionlisation, grouping of countries – Geographical, political, historical, cultural etc.

Unit - II Structure Relief, climate and climatic regions, vegetation. Irrigation, Power and Mineral resources.


Unit - IV Strategic importance of the region, Suez Canal, Geographical background of the modern problems.
Unit - V  Detailed regional study of Turkey, Iraq, Israel and Saudi Arabia.

Books Recommended:
2. Cressey: Cross Road.
4. N.S. Ginnsburg: Pattern of Asia.
8. Vishwanath Tiwari – Asia Ka Bhugolik Swaroop.

(B) South East Asia

Unit - I  Region as a geographical entity and as a component of global system. Basis of regionalization, grouping of countries. Geographical, political, historical, cultural etc.

Unit - II  Structure, Relief, Climate and climatic regions, vegetation. Irrigation power and Mineral resources.


Unit - IV  Strategic importance of the region, Geographical background of the modern problems.

Unit - V  Detailed regional study of Myanmar, Thailand, Malaysia and Indonesia.

Books Recommended:
1. Dudely Stamp: Asia.
2. Fisher, Charles, A.: South East Asia
3. Dobby: South East Asia.
4. Dr. Jagdish Singh – Monsoon Asia.
5. Dr. V. K. Srivastava – Asia.
6. Vishwanath Tiwari Asia Ka Bhugolik Swaroop.

(C) Far East Asia

Unit - I  Region as a geographical entity and as a component of global system. Basis of regionalization, grouping of countries geographical, political, historical, cultural etc.

Unit - II  Structure, Relief, climate and climatic regions, vegetation, Irrigation, Power and Mineral resources.

Unit - IV  Strategic importance of the region, Geographical background of the modern problems.
Unit - V  Detailed regional study of China and Japan.

**Books Recommended:**
1. Dr. M.N. Nigam – Mansoon Ka Asia.
2. Vishwanath Tiwari: Asia Ka Bhaugolik Swaroop.
3. Trewartha; G.T. Japan.

**PRACTICALS**

(A) **Lab Work**

Unit - I  Plane table Surveying; Radiation, Inter section & Resection method with three Points problem.
Unit - II Surveying by Prismatic Compass, open traverse, Close traverse, Elimination of error. Bowditch Method.
Unit - III Use of Sextant; measurement of height-accessible and inaccessible method.

OR

Indian clinometers: Measurement of height-accessible and inaccessible method.

(B). **Field Study Tour and Report:**

Field study tour shall be arranged for about one week duration in an area normally different geographically from the native region. Students will prepare field study report based on primary data and first hand observations of physical, environmental and socio-economic characteristics of the landscape of geographical area/region visited, surveyed and studied. The findings should be well supported by suitable maps and diagrams.

**Note:** -
1. T.A./D.A. and related expenses of Teachers and Supporting Staff on Tour Duty shall be met by the respective Institutions.
2. Normally for a batch of 20 students, one teacher and an attendant would accompany the tour to guide students.

**C. Viva-Voce & Sessional Records**

**DIVISION OF MARKS:**

(A). Field work (One exercise from each unit. Duration four hours)  10+10+5(25)
(B). Field Study, Tour and Report.  15
(C). Viva-Voce & sessional records  10
Books Recommended:

(Dr. Het Ram Singh)
Convener
Board of Studies of Geography,
M.J.P. Rohilkhand, University,
Bareilly.