(9) देनं दमाल उपाहेपाय गोरखप्र भिश्चिमालण, गोरखप्र

## B.A. GEOGRAPHY

## **RULES & REGULATIONS**

- 1. Only those candidates may offer Geography as one optional subject in B.A., who has offered Geography in Inter classes. Inter Science and Agriculture students are exempted from those conditions.
- 2. No private candidates are allowed to offer Geography in B.A.
- 3. The candidate shall have to pass in theory and practical separately obtaining 33 % marks in each.
- 4. There shall be two theory papers of 80 marks each and one practical carrying 50 marks in B.A. /B.Sc. I and B.A. /B.Sc. II examinations, while in B.A. /B.Sc. III, there shall be 3 theory papers of 80 marks each and one practical carrying 60 marks.

## Name of papers in B.A./B.Sc. Geography

|                | Paper | Name of Subject                      | Marks        |
|----------------|-------|--------------------------------------|--------------|
| B.A. /B.Sc. I  | 1     | Physical Geography                   | 60 + 20 = 80 |
|                | II    | Human Geography                      | 60 + 20 = 80 |
|                |       | Practical Geography                  | 40           |
| B.A./B.Sc. II  | I     | Economic Geography                   | 60 + 20 = 80 |
|                | II    | Geography of India                   | 60 + 20 = 80 |
|                |       | Practical Geography                  | 40           |
| B.A./B.Sc. III | 1     | Evolution of Geographical Thought    | 60 + 20 = 80 |
|                | II    | World Regional Geography             | 60 + 20 = 80 |
|                | II    | Environment, Ecology and Development | 60 + 20 = 80 |
|                |       | Practical Geography                  | 60           |
|                |       |                                      |              |

#### **B.A. I Objectives**

- Geography is the study of earth and its inhabitants. Physical and Human Geography- the two main branches of Geography have been given equal importance in framing the syllabus. The main objective of this course is to introduce to the students the fundamental concept of Physical Geography, specially related to lithosphere, atmosphere and hydrosphere.
- Human Geography is to make them understand the man-environment relationship and human capabilities to adopt and modify the environment and its varied conditions.

#### **B.A. II Objectives**

- The economy of the world is undergoing rapid transformation. The process of such transformation of economic activities is dynamic in nature. In view of this objective of economic Geography course is to acquaint the students with this dynamic aspect of economic geography. It also aims to sensitize the students to the concept of sustainable resource use.
- The course is aimed at presenting a comprehensive, integrated, systematic and regional geography of India.

#### **B.A. III Objectives**

- The objective of geographical thought is to introduce the philosophy and methodological foundation of the subject and its place in the world of knowledge and also familiarize the development of geographical thought in different period of time.
- To introduce the concept of environment, pollution and sustainable development.
- To familiarize the students with the concept of region, characteristics of various regions of the world and their underlying uniqueness, complexities and to understand the interaction between physical and human features.

#### **Objectives of Practical**

It is necessary for the students of geography to go through the laboratory exercises. The objectives of the practical course are to train students the basic concept and techniques of handling geographical data through different cartographic and statistical methods. The techniques of surveying with various instruments and field survey are also parts of various exercises.

#### B.A. /B.Sc. Part-I GEOGRAPHY

#### Paper I- PHYSICAL GEOGRAPHY (60+20 = 80 Marks)

- Unit 1: Meaning and scope of Physical Geography; Theories of origin of the Earth-Classical Indian Views, Theories of Kant, Laplace, Jeans & Jeffreys, Russell, Hoyle, Otto Schmidt, Big Bang; Interior of the Earth; Origin of Continents & Ocean Basins- Tetrahedral Theory, Theory of Continental Drift, Concept of Plate Tectonics; Theory of Isostasy.
- Unit 2: Earth Movements- Diastrophism, Folding & faulting, Earthquakes and Volcanoes; Theories of Mountain Building Kober, Jeffreys, Holmes; Rocks & their types; Sub-areal denudation-Weathering and Erosion; Works of Running water, Underground water, Wind, Glaciers & Marine Water and resultant landforms; Normal Cycle of Erosion; System & Pattern of Drainage.
- Unit 3: Composition and structure of atmosphere; Insolation; Vertical & Horizontal distribution of Temperature; Pressure and Winds, Humidity & Precipitation; Types of Rainfall; Origin & Characteristics of Temperate & Tropical Cyclones; Anti-cyclones.
- Unit 4: Surface Configuration of Ocean Basins with special reference to Atlantic & Indian Oceans; Ocean Temperature; Salinity and Density of Ocean Water, Ocean Tides & Currents; Marine Deposits; Coral Reefs & Atolls

#### .Recommended Books:

- 1. G.T.Triwartha:-Elements of Physical Geography
- 2. Wooldridge & Morgan: Physical Basis of Geography
- 3. Singh, D.K.: Physical Geography
- 4. Singh, Savindra: Physical Geography(Hindi)
- 5. Singh, K.N. & Singh, J :- Bhautik Bhoogol

## Paper-II- HUMAN GEOGRAPHY (60+20 = 80 Marks)

- Unit 1: Meaning & Scope; Evolution; Principles and Approaches of Human Geography; Elements of Human Geography with special reference to Jean Brunhes and Huntington; Man and Environment Relationships- Determinism, Possibilism, Neo-determinism, Probabilism.
- Unit 2: Evoltuion of Man- Australopithecus, Homo-habilis, Homo-erectus, Homo-sapien; Man's Spread Over Globe During Pleistocene; Global Migration in Modern World- Their Causes and Consequences; Human Races- Origin & Classification, Cultural Stages and Cultural Realms.
- Unit 3: Habitat and socio-economic Adjustment; Major tribes- Pygmies, Kirghiz, Eskimos, Bushmen, Gond, Gaddi, Tharu and Santhal; Stages of Population Growth; Distribution of Population; Population Agglomerations; Population Problems; Concept of Human Resource Development.
- Unit 4: Human Settlements: Rural Settlements- Types and Patterns with special reference to India; House Types in India. Urban Settlements- Trend & Pattern of Urbanization in the World; Classification of Cities.

#### Recommended Books:

Huntington & Shaw: - Principles of Human Geography.

Majumdar, D.N.:-Races and Culture of Man in India.

Singh, J. & Singh, K.N.:- Human Geography (Hindi)

Srivastava, V.K. & Rao, B.P.:- Human Geography (Hindi)

Dikshit, S.K. & Tripathi, R.D.:-Cultural Geography (Hindi)

## PRACTICALS (40 marks)

| S.No       | Topics .  |  |  |
|------------|---|--|--|
| A-Lab      | 1. Drawing of Scales- Comparative, Diagonal and Vernier.  |  |  |
| Work(2.1/2 | 2. Study & Interpretation of Topographical Sheet  |  |  |
| Hours)     | a) Representation of following relief features by Contours- Hill, Saddle, Plateau, Cliff, Spur, Escarpments, 'U' & 'V' Shaped Valley.   |  |  |
|            | <ul><li>b) Study of 1:50,000 R.F. Topographical Sheets, at least one from Hill, Plateau and Plain region.</li></ul>   |  |  |
|            | 3. Cartographic Representation of Statistical Data  |  |  |
|            | <ul> <li>a) Graphs-Line graph, Band Graph, Hythergraph and Climograph</li> <li>b) Diagrams- Circle, Wheel, Pyramid, Rectangular, Wind Roses.</li> <li>c) Distribution of Population- Dot Method and Choropleth method.</li> </ul> |  |  |
| B-Field    | 1. Survey of Given Area and Plotting the same by Plane Table- Radiation,  |  |  |
| Work(1.1/2 | Intersection and Resection methods, Open & Closed Traverse; Height and  |  |  |
| Hours)     | Depth   |  |  |
|            | 2.Measurement of Indian Clinometer  |  |  |
| C-         | Record and Viva-voce  |  |  |

#### Recommended Books:

- 1. Singh, R.L.:-Elements of Practical Geography.
- 2. Bygott:-Practical Geography.
- 3. Hiralal:- Navin Prayogatmac Bhoogol
- 4. P.R.Chauhan: Prayogatmac Bhoogol
- 5. R.C.Tiwari: Prayogatmac Bhoogol
- 6. Shrivastava, V.K. and Prasad, Mahatam. :- Bhoogol Me Sankhikiya Vidhiyan

#### B.A./B.Sc. Part-II GEOGRAPHY

## PAPER I- ECONOMIC GEOGRAPHY (60+20 = 80 Marks)

- Unit 1: Meaning & Scope of Economic Geography; Concept and Classification of Resources; Soils; Forest and Water resources; Primary Production- Fishing; Types of Agriculture, Distribution and production of major Agriculture Crops- Rice, Wheat, Maize, Cotton, Sugarcane; Plantation Crops-Rubber, Tea & Coffee.
- Unit 2: Von Thunen's Theory of Agricultural Location; Agricultural regions of the World by D. Whittlesey; Mineral & Power Resources- Production and Distribution, Iron-Ore, Copper, Tin, Bauxite, Coal, Petroleum, Natural Gas, Hydro- Electricity & Atomic Power; Consumption of Power Resources.
- Unit 3: Industrialization- Major Industries of the World- Iron & Steel, Cotton, Woolen & Silk, Textile and Fertilizer; Alfred Weber's Theory of Industrial Location; Major Industrial Regions of the World with special reference to U.S.A., Western Europe & Japan.
- Unit 4: Problems and Prospects of Industrialization in 3<sup>rd</sup> World Countries; International Trade-Modern Trend, Role of W.T.O. in World Economy; Major Trade Routes- Land, Water and Air; International Trade Blocks-NAFTA, European union, ASEAN, APEC.

#### Recommended Books:

- 1. Jones & Darkenward: Economic Geography
- 2. Alexander, J.W.: Economic Geography
- 3. Singh, K.N. & Singh, J.: Arthic Bhoogol ke Mool Tatva
- 4. Shrivastava & Rao : Arthic Bhoogol

## PAPER II- GEOGRAPHY OF INDIA (60+20 = 80 Marks)

- Unit 1: Global position of India; Geological Structure; Relief; Drainage Systems; Physiographic Regions; Origin of Monsoon; Climatic Regions; Soils & Natural vegetation; Mineral resources- Iron- ore, Bauxite, manganese, Atomic Minerals; Power Resources- Coal, Petroleum, Hydro-electricity, Non-Conventional Energy Sources.
- Unit 2: Human Resources- Growth & Spatial Pattern of Population; Population Explosion; Trend & Pattern of Urbanization in India; National Population policy; Economic Activity Patterns- Agricultural Land Use Pattern; Irrigation and Multipurpose Projects; major Crops- Wheat, Rice, Maize, Sugarcane, Cotton, Tea, coffee; Impact of Green Revolution; Crop Association Regions.
- Unit 3: Growth of Industries in India; Major Industries- Iron & Steel, Cotton Textiles, Cement, Fertilizer, Paper & Sugar; Industrial Regions; Problems and Prospects of Industrially Backward Regions.
- Unit 4: Transport Network- Road, Rail & Air Transport; Geographical Regions of India- Detailed Study of Assam Valley, Malabar Coast, Middle Ganga Plain and Malwa Plateau.

#### Books Recommended:

- 1. Spate & Learmonth :- India and Pakistan, London
- 2. Singh, R.L.(Ed): India: A Regional Geography, Varanasi
- 3. Tiwari, R.C.:-Geography of India, Allahabad
- 4. Singh, J., Singh, K.N. & Patel, R.B.:-Bharat, Gorakhpur

## PRACTICAL (40 marks)

| S.No       | Topics   | Marks |  |
|------------|--|-------|--|
| A-Lab      | 1.Map Projections-   |       |  |
| Work(2.1/2 | a) Classification and Choice of Projections.                           |       |  |
| Hours)     | b) Construction of Map Projections- Cylindrical Equal Area,            |       |  |
|            | Mercator's, Conical with Two Standard Parallel, Bonne's, Polar         |       |  |
|            | Zenithal Equal Area, Polar Zenithal Stereographic, Polar Zenithal      |       |  |
|            | Orthomorphic.  |       |  |
|            | 2. Study & Interpretation of Indian Daily Weather Reports              | 08    |  |
|            | a) Use of Weather Instruments- Wet & Dry Bulb Thermameter,             |       |  |
|            | Barometer, Wind-Vane, Rain Gauge.                                      |       |  |
|            | b) Study of Weather Symbols and Interpretation of Indian Daily         |       |  |
|            | Weather Reports of January & July; Weather Forecasting.                |       |  |
|            | 3. Geological Maps- Completion of Beds, Drawing of Cross-section and   | 08    |  |
|            | Interpretation of Horizontal, Inclined and Folded Beds.                |       |  |
| B-Field    | Survey and plotting of a given area by Prismatic Compass with Open and |       |  |
| Work(1.1/2 | Closed Traverse Methods, Correction of Closing error. Use of Sextant-  |       |  |
| Hours)     | Measurement of Angels and calculation of Height                        |       |  |
| C-         | Record & Viva-Voce   | 08    |  |

## Recommended Books:

All the books which are recommended for B. A. I

# B.A./B.Sc: III GEOGRAPHY PAPER I- EVOLUTION OF GEOGRAPHICAL THOUGHT (60+20=80 Marks)

- Unit 1: Geography in Ancient Period: India- Geographical knowledge during Vedic, Epic and Puranic Period. Contribution of Aryabhata, Varahmihira, Brahmagupta & Bhaskaracharaya; Contribution of Greek and Roman Geographers; Geography in Middle Ages, Contribution of Arab geographers.
- Unit 2: Renaissance period in Europe, Renowned Travellers and their Geographical Discoveries; German School of Geography: Contribution of Forsters, Kant, Humboldt, Ritter, Richthofen, Ratzel, Hettner, French School of Geography, Contribution of Blache and Brunhes.
- Unit 3: Soviet Geography- Development of Geographical Knowledge, Contribution of Lomonosov, Dokuchaiev, Baransky and Gerasimov, American School- Contribution of Davis, Semple, Huntington, Carl Sauer; British School- Contribution of Mackinder, Herbertson and L.D.Stamp.
- Unit 4: Nature and scope of Geography: Geography as Science, Recent Trends of Geography, Progress of Geography of India.

#### Recommended Books:

- 1. Dikshit R.D.:-Geographical Thought(Hindi & English), New Delhi
- 2. Mazid Hussain: Evolution of Geographical Thought(Hindi & English), Jaipur
- 3. Dickinson R.E.: The Makers of Modern Geography, London
- 4. Singh. J :- Bhaugolic Chintan ka Kram Vikas, Gorakhpur
- 5. Singh, L.R. Bhoogol ki Prakriti, Lucknow
- 6. Kaushik, S.D.:-Bhaugolic Vichardharayein, Meerut
- 7. Dikshit, S.K. Bahugolic Chintan: Udbhav Evam Vikas, Varanasi

## PAPER II-WORLD REGIONAL GEOGRAPHY (60+20 = 80 Marks)

- Unit 1: Concept of Region and Regionalization; Tripartite Division of the World; Natural Regions of the World, Bases of Delimitation and salient features of Monsoon Regions of the World.
- Unit 2: Regional Study of USA- Physical, Climatic & Agricultural Regions, Mineral and Power Resources, Industrial Regions.
- Unit 3: Regional Study of Brazil- Physical, Climatic, Agricultural, Mineral and Power Resources, Industrial Regions.
- Unit 4: Regional Study of Egypt- Physical Region, Agriculture, Mineral and Power Resources, Important Industries.

#### Recommended Books:

- 1. Cole, J :- A Geography of the World: Major Regions, Routledge, London, 1996.
- 2. Dickinson, J.P.et. al: -The Geography of the Third World, Routledge, London, 1996.
- 3. Kolb, A:- East Asia: Geography of the Cultural Regions, Methuen, London, 1977.
- 4. English, Paul ward & Miller, J.A. -: World Regional Geography: A Question of Place, John Wiley, New York, 1989.
- 5. Jackson, R.H. & Human, L.E.: World Regional Geography: Issues for Today, John Wiley, New York, 1991
- 6. Jagdish Singh, et al: Monsoon Asia, Tara Publications, Varanasi.

#### PAPER III- ENVIRONMENT, ECOLOGY & DEVELOPMENT (60+20 = 80 Marks)

- Unit 1: Concept of Environment, Elements of Environment, Concepts of Ecosystems and its structure, Trophic level and food chain, Function of Ecosystems, Biogeochemical Cycle, Role of man in Ecosystem, Environmental Degradation-Concept, cause and consequences.
- Unit 2: Economic Development and Environmental Crisis, Acid Rain, Greenhouse effect, Ozone layer depletion and Global Warming, Impact of Growth of population, industrialization, technology and consumerism on Environment. Causes and Consequences of Deforestation, Soil Erosion, Energy Crisis, Climatic changes due to Environmental pollution.
- Unit 3: Ecosystem in India, causes and consequence of deforestation in India, Soil erosion, Air, Water pollution and flood hazards in India, Urbanization and Environmental degradation.
- Unit 4: Environmental management- Concept and significance, Environmental Impact, Assessment of major development project in India- Damodar Valley project, Tehri, Narmada valley project, concept of Eco-Development, Environmental Management.

#### Recommended Books:

- 1. Allen, P.D.: -Environment & Development
- 2. Gerasimov: Ecology & Geography
- 3. Kayastha, S.L.:-Fundamentals of Environmental Studies
- 4. Khushoo, T.N.:-Environment and Sustainable Development of India
- 5. Singh, J.:-Vatavaran Niyojan aum Samvikas
- 6. Singh, Savindra:-Environmental Geography(Hindi & English)
- 7. Shrivastava, V.K. & Rao, B.P.: Paryavaran Evam Paristhitiki

#### PRACTICAL (60 Marks)

| S.No.     | Topics  | Marks |  |
|-----------|---|-------|--|
| A-Lab     | 1. Statistical Methods in Geography- Mean, Median, Mode, Mean                   | 12    |  |
| Work      | Deviation, Standard Deviation, Spearman's correlation coefficient,              |       |  |
| (3 Hours) | graphical representation and interpretation of Frequency polygon,               |       |  |
|           | Histogram, Ogive.   |       |  |
|           | 2. Analysis of relief: longitudinal & Transverse Profiles, Construction         | 12    |  |
|           | of Superimposed, Projected and Composite Profiles, Wentworth                    |       |  |
| ,         | method of Slope Analysis and Drainage Density                                   |       |  |
|           | 3. Aerial-Photo interpretation- Determination of Scales, Land Use               | 12    |  |
|           | Analysis with the help of Aerial Photographs; Use and Importance of             |       |  |
|           | Computer in Geography, Hardware and Software                                    |       |  |
| B-Field   | The students shall be taken out on a field survey at any one place for about    |       |  |
| Survey    | three days. They will be required to conduct survey of the socio-economic       |       |  |
| _         | landscapes of the concerned area and write a detail report on the basis of data |       |  |
|           | so generated.   |       |  |
| C-        | Practical Records & Viva- Voce  | 10    |  |

Recommended Books:

All the books which are recommended for B.A. I

## Question Model

|       |                               | •                                     |
|-------|-------------------------------|---------------------------------------|
| Q. 1. | All question are compulsory   |                                       |
|       | (a)                           |                                       |
|       | (b)                           |                                       |
|       | (c)                           |                                       |
|       | (d)                           |                                       |
|       |                               | Section –A                            |
|       |                               |                                       |
| Note: |                               |                                       |
| 2.    | •                             |                                       |
| 3.    |                               |                                       |
| 4.    |                               |                                       |
| 5.    |                               |                                       |
|       |                               | Section – B                           |
| Note: |                               |                                       |
|       |                               |                                       |
| 6.    | H-H-A-LVALUU VANNA VANNA NT-A |                                       |
| 0.    | or                            | <u>.</u>                              |
| 7.    |                               |                                       |
|       | or                            |                                       |
|       |                               | •                                     |
| 8.    |                               |                                       |
|       | or                            | · · · · · · · · · · · · · · · · · · · |
|       |                               |                                       |
| 9.    | Or                            |                                       |