

# INTERNATIONAL COLLEGE FOR GIRLS, JAIPUR

## B.A/B.Sc SEMESTER I

### PAPER I

### GEO-101

## PHYSICAL GEOGRAPHY -I

### (LITHOSPHERE)

**Max. Marks : 100**  
**Credits:3**

**Teaching Hours :45 Hours (3 Hrs/Week)**

**Objectives :** This paper will help the students to study the earth surface, tectonic occurrences, movements and resultant landforms.

#### **Unit I**

**10 Hours**

Solar system, Geological Time Scale, Origin of the Earth- Introduction to various theories, Interior of the Earth, Forces of the earth: Endo-genetic and Exo-genetic.

#### **Unit II**

**9 Hours**

Pleistocene glaciation, Origin of continents and oceans-Theory of Continental Drift (Wegener's Drift theory); Rocks : Igneous, Sedimentary, Metamorphic, Theory of Isostasy.

#### **Unit III**

**9 Hours**

Introduction of Plate tectonics, Sea-floor spreading, Mountain Building Theories (Joly, Kober, Holmes).

#### **Unit IV**

**9 Hours**

Volcanoes and related landforms. Earthquakes and related landforms, Denudation: (i) Weathering- types and results, (ii) Erosion- concept of cycle of erosion..

#### **Unit V**

**8 Hours**

Agents of erosion- Works of running water, glaciers, wind, waves and underground water  
Rejuvenation of landforms, Cycle of Erosion by Davis and Penck.

## **Books Recommended**

### **Essential Readings**

- Minshyl, Roger: The Changing Nature of Geography, Hutchinson University Library, O London, 1970
- Strahler, A.N. and Strahler, A.H.: Elements of Physical Geography, Johan Wiley & Sons, 1984
- Ahamed, E. Geomorphology, Kalyani Publishers, New Delhi, 1985
- Singh, Savinder : Bhu-Akriti Vigyan, Tara Publication, Varanasi, 1976
- Wooldridge, S.W. and Morgan, R.S.: The Physical Basis of Geography: An Outline of Geomorphology, Longmans Green & Co. London. 1959
- Singh, Savinder : Physical Geography, Tara Publication, Varanasi, 1976
- K.Siddharth :Earth and its systems

### **Reference Books**

- Strahler, A.M.: Modern Physical Geography. John Wiley and Sons. 1983
- Bury, G.S.: The face of the Earth, Penguins, 1980 Edition
- Small, R.J.: The study of Land Forms, Cambridge University Press, Cambridge (Latest Edition)
- Thornbury, W.D.: Principles of Geomorphology, John Wiley & Sons, (Latest Edition)
- Bartholomew, R.B.: Earth science, Health & Co. Toronto, 1984

## B.A/B.Sc SEMESTER I

### PAPER II

### GEO-102

## GEOGRAPHY OF RAJASTHAN: I

**Max. Marks : 100**  
**Credits :3**

**Teaching Hours : 45 hours (3 Hrs/Week)**

**Objectives :** Study of Rajasthan will help the students in knowing the regional aspects of the state, its geographical conditions and other demographic elements.

### Unit I

**9 Hours**

**Physiography :**Western sandy plain ,Aravali range,Eastern plains,Hadoti plateau.  
**Climate :** Climatic condition in Rajasthan, Climatic regions of Rajasthan. Drought and Famine in Rajasthan, Government programmes to deal with them.

### Unit II

**9 Hours**

**Drainage :** Rivers of Rajasthan: Arabian sea drainage system,Bay of Bengal drainage system,Lakes of Rajasthan-Sweet water lakes, Salty lakes, **Soil:** Classification and distribution of soils in Rajasthan, Desertification. Desert development programme.

### Unit III

**9 Hours**

**Vegetation :** Introduction, Factors affecting vegetation:Physical,Climatic,Biotic,types of forests,Forest depletion and their conservation,Government steps for improvement,Programmes for their development.

### Unit IV

**9 Hours**

**Population:** Factors affecting population, Growth, Distribution and Density of population in Rajasthan,qualitative and quantitative aspects of population,Schedule tribe and Schedule cast,Population Problems and Measures.

### Unit V

**9 Hours**

**Settlements:** Introduction,factors affecting the Site and Situation of settlements,types of settlements.Rural settlements,Urban settlements and pattern.Tribes of Rajasthan:Meena , Bhils,Garasia ,their problems, Programmes for their development. Regional planning approach-Regional developments, developed regions, schemes of development, problems.

## **Books Recommended**

### **Essential Readings**

- Chauhan,T.S.: Geography of Rajasthan, Jaipur
- Bhalla,L.R.: Geography of Rajasthan, Kuldeep Publication
- Mishra,V.C.: Geography of Rajasthan
- Sharma,B.L.: Agricultural Typology of Rajasthan
- Govt. of Rajasthan: Techno-Economic Survey of Rajasthan Govt. of Rajasthan Publication
- Singh,R.L.: Regional Geography of India
- Gurjar,R.K.: Indira Gandhi Nehar Kshetra Ka Bhogool, Rajasthan Hindi Granth Academy, Jaipur
- Sharma.H.S,Sharma M.L,Rajasthan ka bhoogol.

**B.A/B.Sc SEMESTER I**  
**GEO-103**  
**PRACTICALS**

**Max. Marks :100**  
**Credits :2**

**Teaching Hours : 60 hours (4 Hrs/Week)**

**Scales :** Definition and Types . Conversion of R.F into Statement and Visa-versa.  
Construction of Plain ,Diagonal and Comparative scale.

**Representation of Relief:**

- Spot heights
- Bench Marks
- Hachures
- Hill Shading
- Contours

**Contours :**

Study of contours of important landforms:

Hill	Plateau	Gorge
Waterfall	Hanging valley	U shaped valley
V shaped valley	Convex slope	Concave slope
Ridge	Lake	Cliff

**Profiles :** Definition and Types.

- Serial
- Superimposed
- Composite
- Traverse
- Longitudinal

**Introduction of statistics:** variables, definition and types, data and its arrangements (Tabulation)

Enlargement and reduction of maps

- Manual techniques.
- Electronic techniques.

**Books Recommended:**

- Singh.R.L, Elements of Practical Geography,Kalyani publishers ,New Delhi.
- Sharma.J.P,Practical Geography,Rastogi Publishers,Merut.
- Monkhouse, F.J.: Maps and Diagrams, Methuen & Co., London
- Singh,R.L. and Dutt, P.K.: Elements of practical Geography, Students Friends, Allahabad
- Mishra,R.P. and Ramesh,A.: Fundamental of Cartography, Macmillan, New Delhi. 1986

**Reference Books:**

- Garnett,A: Geographical Interpretation of Topographical Maps. George Harrap & Co., London
- Birch, T.W.: Topographical & Statistics Maps, Clarndon Press, Oxford
- Robinson, A.I. and Others: Elements of Cartography, John Wilet and Sons, New York

**B.A/B.Sc SEMESTER II**  
**PAPER I**  
**GEO-201**  
**PHYSICAL GEOGRAPHY -II**  
**(CLIMATOLOGY AND OCEANOGRAPHY)**

**Max. Marks: 100**  
**Credits :3**

**Teaching Hours : 45hours (3 Hrs/Week)**

**Objectives :** This paper will acquaint the students with the global climatic conditions and the oceanic geography.

**Unit I** **9 Hours**

Composition and Structure of Atmosphere, Insolation , Temperatures: world patterns- July and January, Horizontal and Vertical distribution of atmospheric temperature, Inversion of Temperature. Heat budget of the earth.

**Unit II** **9 Hours**

Atmospheric pressure belts of the world; coriolis forces( concept and effects), Wind circulation; planetary and local winds; monsoons and jet streams; clouds, humidity, Types of Rainfall , Air masses.

**Unit III** **9 Hours**

Adiabatic and non adiabatic(concepts), Temperate and tropical cyclones; types and distribution of precipitation; Koppen's and Thornthwaite's classification of world climate, concept of micro climatic changes, Global warming (related to glacial).

**Unit IV** **9 Hours**

**Introduction to Oceanography:** Definition ,nature and scope of Oceanography, Hydrological cycle, marine resources, coral reefs. Ocean temperature.

**Unit V** **9 Hours**

Bottom topography of the Atlantic, Indian and Pacific Oceans; Salinity of oceans; ocean deposits; ocean movements( waves, currents, tsunamies and tides).

**Books Recommended**

- Lal.D.S, Climatology, Allahbad Publications
- Trewartha, G.T. and Ikrata: Introduction to climate, International Studies.
- Critchfeild, H.- General Climatology, Prentice Hall, New York (Latest Edition)
- Banerji,R.C. and Upadhyaya,D.S.: Mausam Vigyan, Rajasthan Granth Academy, Jaipur, 1978
- Lyolph, Paul.E: The Climate of The Earth, Rowmen and Allanheld, Totowa H.j.1985
- Mathur,J.R.: Climatology, McGraw Hill, New York(Latest Edition)
- Patterson.S.: Introduction to Meterorology, McGraw Hill Book Co. London (Latest Edition)
- Striger,E.T.: Foundation of Climatology, Surjeet Publications, Delhi, 1982
- Thurman,H.B.: Introductory Oceanography, Charles Webber E.Mem Publishing Co. 1984
- Gerald,S.: General Oceanography: An Introduction, John Wiley & Sons, New York, 1980

**B.A/B.Sc SEMESTER II**  
**PAPER II**  
**GEO-202**  
**GEOGRAPHY OF RAJASTHAN-II**

**Max. Marks :100**  
**Credits :3**

**Teaching Hours : 45 hours (3 Hrs/Week)**

**Objectives :** The economic geography of Rajasthan helps the students know about the natural resources , irrigation, agriculture wealth of the state.

**Unit I**

**9 Hours**

**Animal Resources :** Introduction, Distribution and density of Livestock, Breeds of Cattle, Sheep, Goats, Camels, Poultry, Dairy Development projects in Rajasthan.

**Unit II**

**9 Hours**

**Irrigation development :** Water Resources: Sources of irrigation in Rajasthan,  
**Irrigational Projects :**Indira Gandhi Canal Project, Chambal Project, Bhakra Nangal Project, Beas Project, Mahi Bajaj Sagar Project and minor projects.

**Unit III**

**9 Hours**

**Agriculture:** Land use, Dry farming, Major crops-Bajra, Wheat, Guar, Gram, Jowar, Maize, Barley, Rice. Cash crops: Sugar cane,Cotton,Oil seeds,Seasum, Groundnut, Tobacco, Spices,Agricultural Regions of the State, Problems of Agriculture development,

**Unit IV**

**9 Hours**

**Mineral Resources:** Spatial distribution- Iron-ore, Zins, Manganese, Lead,Silver, Copper,Tungston,Non-Metallic:Gypsum,Mica, feldspar , Asbestos, Silica, Quartz, Manganese,China clay,Fire clay,Dolomite,Emeralds, Fertilizer Minerals.

**Unit V**

**9 Hours**

**Power resources-**Conventional sources of energy: Coal, Petrol, Natural gas, Hydro-electricity Non-Conventional sources of energy Problems and Measures. **Trade and Transport** Pattern of Rajasthan.

**Books Recommended**

- Chauhan,T.S.: Geography of Rajasthan, Jaipur
- Bhalla,L.R.: Geography of Rajasthan, Kuldeep Publication
- Mishra,V.C.: Geography of Rajasthan
- Sharma,B.L.: Agricultural Typology of Rajasthan
- Govt. of Rajasthan: Techno-Economic Survey of Rajasthan Govt. of Rajasthan Publication
- Singh,R.L.: Regional Geography of India
- Gurjar,R.K.: Indira Gandhi Nehar Kshetra Ka Bhogool, Rajasthan Hindi Granth Academy, Jaipur
- Sharma.H.S,Sharma M.L,Rajasthan ka bhoogol.

## B.A/B.Sc SEMESTER II

### GEO-203

## PRACTICALS

**Max. Marks 100**  
**Credits :2**

**Teaching Hours : 60 hours (4 Hrs/Week)**

**Chain and Tape Survey** : Introduction to the techniques of field survey in Geography. Importance of Chain and Tape Surveying, Characteristics. Stages of Surveying, Study of the instruments used in the survey.

#### **Introduction to Surveying**

- Open Traverse
- Closed Traverse

Merits and Demerits of this survey.

**Weather Maps** : Study of Indian weather maps of January and July. Weather Symbols.

Construction of a **Climograph** and **Hythergraph**.

One dimensional diagrams ( concept and uses).

#### **Books Recommended**

#### **Essential Readings**

- Singh.R.L, Elements of Practical Geography,Kalyani publishers ,New Delhi.
- Sharma.J.P,Practical Geography,Rastogi Publishers,Merut.

#### **Books Recommended:**

- Monkhouse, F.J.: Maps and Diagrams, Methuen & Co., London
- Singh,R.L. and Dutt, P.K.: Elements of practical Geography, Students Friends, Allahabad
- Mishra,R.P. and Ramesh,A.: Fundamental of Cartography, Macmillan, New Delhi. 1986
- Garnett,A: Geographical Interpretation of Topographical Maps. George Harrap & Co., London
- Birch, T.W.: Topographical & Statistics Maps, Clarndon Press, Oxford



**B.A/B.Sc SEMESTER III**  
**PAPER I**  
**GEO-301**  
**GEOGRAPHY OF INDIA -I**

**Max. Marks : 100**  
**Credits :3**

**Teaching Hours : 45 hours (3Hrs/Week)**

**Objectives :** This paper helps the student to have a regional study of India learning its physiography, drainage, climate ,agriculture scenario ,industrial trends and transport.

**Unit I**

**9 Hours**

**Physical Setting :** Location of India in the world context; Physiography, **Drainage, Climate** :Seasons, Mechanism of Indian monsoons; Tropical cyclones and western disturbances ; Climatic regions; **Natural vegetation.**

**Unit II**

**9 Hours**

**Resources :**Soil types and their distribution .Mineral and Energy resources: Distribution, utilization and conservation; livestock resources.

**Unit III**

**9 Hours**

**Agriculture :** Types of agriculture; Infrastructure–irrigation, institutional factors–land holdings, and land reforms; land capability; agro-and social forestry; agro-climatic regions; green revolution.

**Unit IV**

**9 Hours**

**Industry :** Evolution of industries; location factors of cotton, jute, iron and steel, fertilizer, paper, chemicals, automobile and cottage industries; industrial development and govt. policies.

**Unit V**

**9 Hours**

**Transport, Communication and Trade :** Road, railway, waterway, airway and pipeline networks and their complementary roles in regional development; Importance of ports, International trade.

**Books Recommended**

**Essential readings**

- Khullar.D.R,India,A comprehensive Geography,Kalyani Publishers.
- Singh.R.L,Geography of India
- Spectrum Books Pvt. Lmtd,Geography of India.

**Reference Books**

- Deshpande C.D. : Indian-A Regional Interpretation, Northern book Centre, New Delhi. 1992.
- Mitra, A : Levels of Regional Development India Census of India, Vol. I, Part I-A (i) and (ii) New Delhi, 1967.
- Routray, J.K. : Geography of Regional Disparity, Asian Institute of Technology, Bangkok, 1993.
- Shafi, M : Geography of South Asis, 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.

## B.A./B.Sc SEMESTER III

### PAPER II

### GEO-302

## HUMAN GEOGRAPHY-I

**Max. Marks : 100**  
**Credits:3**

**Teaching Hours : 45 hours (3hrs/Week)**

**Objectives :** The study of human geography helps the students know about the human component in geography- Evolution of possibilism , human occupations, its tribes etc.

### Unit I

**9 Hours**

**Introduction:** Definition, aim and scope of Human Geography, Relation of Human Geography with other sciences, Essential facts of Human geography by Brunches and Huntington.

### Unit II

**9 Hours**

**Schools of thought in Human Geography :** Determinism, Stop and go determinism and Possibilism. Races of mankind : Distribution and characteristics.

### Unit III

**9 Hours**

**Primary Human occupations.** Elements of the environment and their impact on the Habitat, economy and Society of Eskimos, pygmies, Bushman,

### Unit IV

**9 Hours**

Human establishmens and centres of human civilization. Building materials and house types in the world.

### Unit V

**9 Hours**

**Perspectives in Human Geography :** Areal differentiation; Environmentalism; Quantitative revolution in Geography, quantitative v/s qualitative.

### Books Recommended

#### Essential Readings

- Hussain Majid : Human Geography, Rawat Brothers, Jaipur.
- Mehrotra and Saxena - Manav Bhugol, Laxminarayan Agrawal, agra.
- Kaushik.S.D - Manav Bhugol, Rastogi & Co., Merath
- Vishvnath Diwedi and Kannojiya - Manav Bhugol ke siddhant, Kitab Mahal, Allahbad.
- Dixit.R.D, 'Geographical Thought'

## Reference Books

- Geographical Purana S.M Ali, Peoples Publication house, Delhi.
- Human and Economic Geography Leong, G.C and Morgan, G.L 1982.
- Cultural Landscape: An Introduction to Human Geography J.M Rubenstein 2004, Prentice Hall.
- Manav Vigyan B.R.K Shukla and S.Rastogi, Lucknow
- Alexander, Joh, W. Economic Geography, Prentice Hall Ltd. New Delhi, Latest Edition.
- Chandra, R.C. : A Geography of Population : Concepts Determinants and Patterns, Kalyani Publishers, New Delhi, 1986
- Stephen, G.S. Wright, J.K & Telford, E.M. (eds) " : a World Geography of Forest Resources, Ronald Press Co., New York
- Janki, V.a. : Economic Geography, Concept Publishing Co., New Delhi, 1985.
- Boesch, H. : A Geography of world Economy, D. Van Nostrand.
- Miller, E. : Geography of Manufacturing. Prentice Hall New Jersey.
- Chorley, R.J. : Water, Earth and Man, Methuen, London, 1967.
- Hussain.Majid, Geographical Thought

## B.A/B.Sc SEMESTER III

GEO-303

### PRACTICALS

**Max. Marks :** 100  
**Credits:**2

**Teaching Hours :** 60 hours (4Hrs/Week)

**Representation of Statistical Data** ---Two and Three dimensional diagrams, their construction properties and uses in special reference to the following diagrams representing -Population, agriculture and transportation .

- Pyramid diagram
- Square diagram
- Rectangular diagram
- Ring diagram
- Pie diagram
- Traffic Flow

**Maps :** **Quantitative Map:** Dot Map , Isopleth Map, Choropleth Map  
**Qualitative Map:** Picture maps, Chorochromatic, Chorochromatic maps etc

**Statistical Methods :**

Application of Mean , Median ,Mode Quartile deviation, mean deviation and Standard deviation in Geography.

#### **Books Recommended**

- Singh.R.L, Elements of Practical Geography,Kalyani publishers ,New Delhi.
- Sharma.J.P,Practical Geography,Rastogi Publishers,Merut.
- Monkhouse, F.J.: Maps and Diagrams, Methuen & Co., London
- Singh,R.L. and Dutt, P.K.: Elements of practical Geography, Students Friends, Allahabad
- Mishra,R.P. and Ramesh,A.: Fundamental of Cartography, Macmillan, New Delhi. 1986

#### **Reference Books:**

- Garnett,A: Geographical Interpretation of Topographical Maps. George Harrap & Co., London
- Birch, T.W.: Topographical & Statistics Maps, Clarendon Press, Oxford
- Robinson, A.I. and Others: Elements of Cartography, John Wiley and Sons, New York

**B.A/B.Sc SEMESTER IV**  
**PAPER I**  
**GEO-401**  
**GEOGRAPHY OF INDIA –II**

**Max. Marks :100**  
**Credits :3**

**Teaching Hours : 45 hours (3Hrs/Week)**

**Objectives :** This paper helps the student to study India in detail knowing its culture, settlements ,political scenario and planning in detail.

**Unit I**

**9 Hours**

**Cultural Setting :** Races, major tribes and their problems; **Population:** Qualitative and Quantitative aspects: Growth, distribution and density of population;, **Migration,** Population problems and policies.

**Unit II**

**9 Hours**

**Settlements :** Types of rural settlements and urban settlements, Urbanization and related problems.

**Unit III**

**9 Hours**

**Regional Development and Planning:** Five Year Plans; IRDP; panchayati-raj and decentralized planning; CADP; watershed management; **Developmental Planning:** Multi-level planning, Planning for backward areas. Planning regions and regional planning.

**Unit IV**

**9 Hours**

**Political Aspects :** Geographical basis of Indian federalism; international boundaries of India and bilateral disputes (international), India and SAARC.

**Unit V**

**9 Hours**

**Contemporary Issues :** Environmental hazards–landslides, earthquakes, floods and droughts, issues related to environmental pollution; regional disparities

**Books Recommended**

**Essential readings**

- Khullar.D.R,India,A comprehensive Geography,Kalyani Publishers.
- Singh.R.L,Geography of India
- Spectrum Books Pvt. Lmt,Geography of India.

**Reference Books**

- Deshpande C.D. : Indian-A Regional Interpretation, Northern book Centre, New Delhi. 1992.
- Mitra, A : Levels of Regional Development India Census of India, Vol. I, Part I-A (i) and (ii) New Delhi, 1967.
- Routray, J.K. : Geography of Regional Disparity, Asian Institute of Technology, Bangkok, 1993.
- Shafi, M : Geography of South Asis, 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.
- Regional Planning in India                      V.K Puri
- India    Jagdish Singh
- Economic Geography of India                Kamlesh Paliwal

## B.A/B.Sc SEMESTER IV

### PAPER II

### GEO-402

## HUMAN GEOGRAPHY-II

**Max. Marks: 100**  
**Credits :3**

**Teaching Hours : 45 Hours (3Hrs/Week)**

**Objectives :** This paper benefits the student in the field of demography, migration trends and urbanization.

#### Unit I

**9 Hours**

**World Demographic Trends:** Growth, distribution and density , Population Resource regions; Concepts of over-under population.

#### Unit II

**9 Hours**

Optimum population, World population problems. Demographic Transition, Principal Human Agglomerations.

#### Unit III

**9 Hours**

**International Migrations:** Causes, types and Impacts on the past and present times. Types of Migration, Causes and consequences of migration.

#### Unit IV

**9 Hours**

Types and patterns of Urban and rural settlements. Importance of site and Situation. Hierarchy of urban settlements; problems of urbanization.

#### Unit V

**9 Hours**

Concept of primate city and rank-size rule; functional classification of towns; sphere of urban influence; rural-urban fringe; satellite town.

### **Books Recommended**

#### **Essential readings**

- Hussain Majid : Human Geography, Rawat Brothers, Jaipur.
- Mehrotra and Saxena - Manav Bhugol, Laxminarayan Agrawal, agra.
- Dr. kaushik - Manav Bhugol, Rastogi & Co., Merath
- Vishvnath Diwedi and Kannojiya - Manav Bhugol ke siddhant, Kitab Mahal, Allahbad.

## Reference Books

- Geographical Thought S.M Ali, Peoples Publication house, Delhi.
- Human and Economic Geography Leong, G.C and Morgan, G.L 1982.
- Cultural Landscape: An Introduction to Human Geography J.M Rubenstein 2004, Prentice Hall.
- Manav Vigyan B.R.K Shukla and S.Rastogi, Lucknow
- Alexander, Joh, W. Economic Geography, Prentice Hall Ltd. New Delhi, Latest Edition.
- Chandra, R.C. : A Geography of Population : Concepts Determinants and Patterns, Kalyani Publishers, New Delhi, 1986
- Stephen, G.S. Wright, J.K & Tcclaff, E.M. (eds) " : a World Geography of Forest Resources, Ronald Press Co., New York
- Jnki, V.a. : Economic Geography, Concept Publishing Co., New Delhi, 1985.
- Boesch, H. : A Geography of world Economy, D. Van Nostrand.
- Miller, E. : Geography of Manufacturing. Prentice Hall New Jersey.
- Chorely, R.J. : Water, Earth and Man, Methuen, London, 1967.
- Population Geography R.C Chandana
- Population Geography Nagda

## B.A/B.Sc SEMESTER IV

### GEO-403

### PRACTICALS

**Max. Marks :** 100  
**Credits:**2

**Teaching Hours :** 60 hours (4Hrs/Week)

**Prismatic Compass Survey:** Introduction to the techniques of field survey in Geography. Importance of Prismatic Compass Surveying, Characteristics. Stages of Surveying, Study of the instruments used in the survey.

**Types of Prismatic Surveying:**

- Open Traverse
- Closed Traverse
- Bowditch Method

Merits and Demerits of this survey.

**Meteorological Instruments :**

- Maximum and Minimum Thermometer
- Dry and Wet Bulb thermometer
- Aneroid Barometer
- Rain Gauge
- Wind Vane
- Anemometer

**Local survey report** (a socio-economic aspect).

**Books Recommended**

**Essential Readings**

- Singh.R.L, Elements of Practical Geography, Kalyani publishers ,New Delhi.
- Sharma.J.P, Practical Geography, Rastogi Publishers, Merut.
- Monkhouse, F.J.: Maps and Diagrams, Methuen & Co., London
- Singh, R.L. and Dutt, P.K.: Elements of practical Geography, Students Friends, Allahabad
- Mishra, R.P. and Ramesh, A.: Fundamental of Cartography, Macmillan, New Delhi. 1986

**Reference Books:** Garnett, A.: Geographical Interpretation of Topographical Maps. George Harrap & Co., London



## **B.A/B.Sc SEMESTER V**

### **PAPER I**

### **GEO-501**

## **EVOLUTION OF GEOGRAPHICAL THOUGHT**

**Max. Marks : 100**  
**Credits:3**

**Teaching Hours : 45 Hours (3Hrs/Week)**

**Objectives :** This paper is an attempt towards making the student aware of the various fields of Geography like, Thought, Agriculture, Industrial, Urban and Transport.

#### **Unit I**

**9 Hours**

**History of Geographic Thought:** The nature of Geography is the early classical period with reference to the works of Horodotus, Eratosthenes, Strabo and Ptolemy.

#### **Unit II**

**9 Hours**

Early Medieval Geography. The Revival of Geography from the 16th to the early 19th century. The works of Varenius. Humboldt and Ritter.

#### **Unit III**

**9 Hours**

The nature of Geographical Thought in the second half of 19th century. The Dualism in Geography.

#### **Unit IV**

**9 Hours**

The Works of Peschel and W.M. Davis, Retzel, Semple Richtnofen, Hetter, Herbertson and saur.

#### **Unit V**

**9 Hours**

Concepts of Areal differentiation and Region. Natural Regions and Geographical Regions,.

### **Books Recommended**

1. Hartshorne, Richard : The Nature of Geography (Annals of American Geographers 1939-1947).
2. Hartshorne, Richard : Perspective on the Nature of Geography, John Murry, London.
3. Taylor, Griffith (Ed.) : Geography in the Twentieth Century, New York, 1951.
4. Jones, Clarence F. (Ed.) : Inventory and Prospects, Syracuse, 1945.
5. Jones, Preston E. : American Geography.
6. Bowman, Isabian : Geography in Relation to the Social Science New York ; 1934.
7. Mackinder, Halford, J. : On the scope and Method of Geography. Proceedings of the Royal Geographical Society, 1887.
8. Wooldridge, S.W. and W.G. East : Spirit and Purpose of Geography.
9. Dickson, R.E. : Making of Geography, London.
10. Singh, R.L. (Ed.) : India A Regional Studies, Published for the 21st International Geographical Congress held New Delhi, 1968.
11. Singh, R.L. (ed.) India A Regional Geography. National Geography. National Geographical Society of India, Varanasi, 1971.
12. Spate, O.H.K. and Learmonth, A.T.A. - India and Pakistan, Land, People and Economy, Methuen & Co. London, 1967.
13. Srivastava, M.A. - Trade of India, S. Chand & Co. Delhi, 1967.
14. Wadia, D.N. - Geology of India, MacMillan & Co. London, 1967.
15. Wadia, Mahar and Wadia, D.N. - Minerals of India, National Book Trust, New Delhi, 1966.
16. Wooldridge, S.W. : Geography as a Science.

## B.A/B.Sc SEMESTER V

### PAPER II

### GEO-502

## WORLD GEOGRAPHY-I

**Max. Marks :** 100  
**Credits:**3

**Teaching Hours : 45 Hours (3Hrs/Week)**

**Objectives :** This paper helps the student know about the various economic aspects of the world. It helps them study about the various natural resources, crops and minerals etc.

#### Unit I

**9 Hours**

Introduction to the major regions and countries of the world, Major vegetation, soil, minerals and power resources, agriculture and trade systems in the world.

#### Unit II

**9 Hours**

**Sectors of Economy-** Primary, Secondary, Tertiary, Quaternary. **Natural Resources:** Definition , Classification ,Distribution, exploitation and conservation of Forests, Soil, Water, Fisheries.

#### Unit III

**9 Hours**

**Geography of Primary Production : Agriculture**–Wheat, Rice, Sugarcane, Cotton, tea, Coffee, Jute, Rubber, World Agricultural types.

#### Unit IV

**9 Hours**

**Minerals:** Factors affecting the mining and exploitation of Minerals, Metallic and Non-Metallic, Exploitation and conservation of mineral resources,

#### Unit V

**9 Hours**

Concept of resource utilization and their conservation, Conservation of Soil, Water, forests and other resources.

### **Books Recommended**

#### **Essential Readings**

- Kaushik.S.D, Sansadhan Bhoogol
- Human and Economic Geography G.C Leong and Morgan, Oxford University Press, London
- Maurya.S.D, Manav Bhoogol

## Reference Books

- Economic Geography J.I Guha and Pr. Chatterjee
- Economic Geography and Commercial Geography R.N Dubey and L.R Singh
- Economic Geography S,K Sadhukon
- Economic Geography V.A Janaki ,Concept Publishing Co,  
NewDelhi
- Economic Geography and Commercial Geography K.K Khanna and V.I Gupta

## B.A/B.Sc SEMESTER V

### GEO-503

## PRACTICALS

**Max. Marks :** 100  
**Credits:**2

**Teaching Hours :** 60 hours (4Hrs/Week)

**Map Projection:** Definition, Classification. Construction of projections by graphical method-

- Polar Zenithal Projection,
- Gnomonic Projection,
- Stereographic Projection
- Orthographic projection
- Simple Conical Projection with one Standard Parallel
- Conical projection with two Standard Parallel
- Polyconic Projection
- Bonne's Projection
- Simple Cylindrical Projection
- Cylindrical Equal Area Projection

**Statistics :** concept of correlation, ranking, concurrent deviation and techniques of correction.

**Topographical Maps :** Definition, Classification and interpretation of Indian topographical Sheets. Topographical Symbols.

### Books Recommended

#### **Essential Readings**

- Practical Geography R.L Singh
- Prayogik Bhoogol J.P Sharma

#### **Reference Books**

- Elements of Cartography John Wiley and A.Robinson
- An Introduction to the study of Map projections, J.A Steers 1965,London .
- Maps and Diagrams F.J Monkhouse, Methuren Co Lmted, London
- Statistical Methods in Geographical Studies A. Mahmood, Rajesh Publications,Delhi
- Working with Maps K.K Gupta and V.C Tyagi Survey of India DST, New Delhi.

## B.A/B.Sc SEMISTER VI

### PAPER I

### GEO-601

## GEOGRAPHICAL METHODOLOGIES

**Max. Marks :** 100  
**Credits :**3

**Teaching Hours :** 45 Hours (3Hrs/Week)

**Objectives :** This paper is an attempt towards making the student aware of the various fields of Geography like, Political, Social and Regional.

#### Unit I

**9 Hours**

**Dichotomy in Geography-**Man and Environment ,Quantitative revolution, Behavioral Geography.

Social structure and social process, Concept of culture areas, Cultural regions.

#### Unit II

**9 Hours**

Concept of Nation and state, Geopolitics, Global strategic views (Heart land and Rimland theories)

Delimitation of agriculture regions, measurement of agriculture productivity, Crop combinations and diversification, Von Thunen's Model.

#### Unit III

**9 Hours**

Classification of Industries: Weber's and Losch's approaches, Footloose industries. Central Place theories of Christaller and Losch.

#### Unit IV

**9 Hours**

Concept of a region; types of regions and methods of regionalization; growth centers and growth poles; regional imbalances. Malthusian and Marxian models of Population.

#### Unit V

**9 Hours**

Models of Transportation, transport cost, Inter regional and intra regional, Connectivity and Accessibility.

## **Books Recommended**

### **Essential Readings**

- **Political Geography** Political Geography Sudhiptta Adhikari
- **Social Geography** Social Geography Majjid Hussain
- **Regional Planning** Regional Planning in India V.K Puri

### **Reference Books**

- Human and Economic Geography, G.C Leong and Morgan, Oxford University Press, London .
- **Regional Geography** Regional Planning in India V.K Puri

### **Agriculture Geography:**

- Agricultural Geography Majjid Hussain
- Agricultural Geography J.Singh and S.S Dhillon. Tata McGraw Hill Publishing Company Latc. New Delhi.
- Agricultural Geography Pramila Kumar and S.K Sharma

### **Industrial Geography:**

- Economic Geography Guha and Chatterjee
- Human and Economic Geography G.C Leong and Morgan, Oxford University Press, London .
- Industrial Geography of India Prof. Hemlata Joshi

## B.A/B.Sc SEMESTER VI

### PAPER II

### GEO-602

## WORLD GEOGRAPHY-II

**Max. Marks :** 100  
**Credits :**3

**Teaching Hours : 45 Hours (3Hrs/Week)**

**Objectives :** This paper will facilitate the students to know about the energy resources , the industries of the world and the role of major organization in the world.

#### Unit I

**9 Hours**

**Energy resources :** Conventional Sources, Distribution and Production, Coal, Petrol, Natural Gas.

#### Unit II

**9 Hours**

Non-Conventional sources of energy, Hydro-electricity. World potential and development, Atomic Energy.

#### Unit III

**9 Hours**

**World industries**– Location patterns and problems; Textile, iron and steel, food processing, paper and pulp foot loose- electronics, famine–causes, effects and remedies.

#### Unit IV

**9 Hours**

World economic development–measurement and problems; energy crisis; the limits to growth.

#### Unit V

**9 Hours**

Role of **international organizations** in shaping the world economy. Study of WTO, EU, SAARC, ASEAN.

### **Books Recommended**

#### **Essential Readings**

- Human and Economic Geography G.C Leong and Morgan, Oxford University Press, London .
- Sansadhan Bhoogol S D Kaushik
- Manav Bhoogol Maurya



## Reference Books

- Economic Geography J.I Guha and Pr. Chatterjee
- Economic Geography V.A Janaki ,Concept Publishing Co, NewDelhi
- Economic Geography and Commercial Geography R.N Dubey and L.R Singh
- Economic Geography S,K Sadhukon
- Economic Geography and Commercial Geography K.K Khannan and V.I Gupta

## B.A/B.Sc SEMISTER VI

### GEO-603

## PRACTICALS

**Max. Marks :** 100  
**Credits :**2

**Teaching Hours :** 60 hours (4Hrs/Week)

**Plane Table Survey / Excursion :** Introduction to the techniques of field survey in Geography. Importance of Plane Table Surveying, Characteristics. Stages of Surveying Study of the instruments used in the survey.

### **Basic principles of Surveying:**

- Intersection Method
- Radiation Method
- Resection Method

Merits and Demerits of this survey.

**Remote Sensing:** Introduction to remote sensing. Aerial photography **Books**

### **Essential Readings**

- |                          |                    |
|--------------------------|--------------------|
| ▪ Digital Remote Sensing | P.Nag and M Kudrat |
| ▪ Practical Geography    | R.L Singh          |
| ▪ Prayogik Bhoogol       | J.P Sharma         |

### **Village Survey report.**

### **Reference Books**

- |   |   |
|---|---|
| ▪ Elements of Cartography                     | John Wiley and A.Robinson                                     |
| ▪ Maps and Diagrams                           | F.J Monkhouse, Methuren Co<br>Lmtd, London                    |
| ▪ Remote Sensing for Beginners                | P.K Gupta, Affiliated East<br>West press,Delhi                |
| ▪ Statistical Methods in Geographical Studies | A. Mahmood, Rajesh<br>Publications,Delhi                      |
| ▪ Working with Maps                           | K.K Gupta and V.C Tyagi<br>Survey of India DST, New<br>Delhi. |