# DEPARTMENT OF GEOGRAPHY

# **B.A / B.Sc (Three Year Course)**

# **Six Semester Programme**

# **Objectives of the course:**

- Geography as an optional is one of the best combinations as it has a practical aspect to it, with any other subject.
- Geography being very scoring and logic based ,happens to be a very good option for civil services after graduation.
- Geography as a subject has many fields attached to it, with many career options like,
  - Remote sensing
  - Urban planning
  - GIS
  - Town Planner
  - Cartographer
  - Surveyor
  - Climatologist
  - Transportation Management
  - Environment Management
  - Demographer
  - Information Scientist
  - National park service Ranger
  - Writer/researcher.

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

#### PAPER I

### **GEO-101**

# PHYSICAL GEOGRAPHY -I

# (LITHOSPHERE)

Max. Marks: 100 Teaching Hours: 45 Hours (3 Hrs/Week)
Credits: 3

**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

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, Homes).

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.

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

Credits:3

**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.

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

Credits:2

**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. Method of drawing profiles:

- Serial
- Superimposed
- Composite
- Traverse
- Longitudinal

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

Credits:3

**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.

Unit II 9 Hours

Atmospheric pressure belts of the world; heat budget of the earth; Wind circulation; planetary and local winds; monsoons and jet streams; Types of Rainfall ,ir masses.

Unit III 9 Hours

Temperate and tropical cyclones; types and distribution of precipitation; Koppen's and Thornthwaite's classification of world climate; Clouds: Formation and types.

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 currents and tides;

Department	of Geog	raphy
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- 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, Surject 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 Teaching Hours : 45 hours (3 Hrs/Week)

Credits:3

**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, Hydroelectricty Non-Conventional sources of energy Problems and Measures. **Trade and Transport** Pattern of Rajasthan.

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- 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 Teaching Hours: 60 hours (4 Hrs/Week) Credits: 2

**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**.

#### **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

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

#### PAPER I

#### **GEO-301**

### **GEOGRAPHY OF INDIA -I**

Max. Marks : 100 Teaching Hours : 45 hours (3Hrs/Week)

Credits:3

**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 :** Crops; Infrastructure–irrigation, seeds, fertilizers, power; institutional factors–land holdings, land tenure 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, drugs and pharmaceutical, automobile and cottage industries; New industrial policy.

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.

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

Credits:3

**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.

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## **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 Rubenstem 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 & Tclaff, 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.
- Chorely, 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 Teaching Hours : 60 hours (4Hrs/Week)

**Credits:2** 

**Representation of Statistical Data** (One, Two and Three dimensional )Population, agriculture and transportation data with the help of,

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

Maps: Quantitative Map: Dot Map, Isopleth Map, Choropleth Map

**Qualitative Map:**Pictuer maps, Chorochromatic, Chororschematic maps

etc

#### **Statistical Methods:**

Application of Mean ,Median ,Mode Quartile 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, Clarndon Press, Oxford
- Robinson, A.I. and Others: Elements of Cartography, John Wilet and Sons, New York

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

#### PAPER I

### **GEO-401**

#### **GEOGRAPHY OF INDIA-II**

Max. Marks :100 Teaching Hours : 45 hours (3Hrs/Week)

Credits:3

**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.

Unit IV 9 Hours

**Political Aspects :** Geographical basis of Indian federalism; international boundary of India and related issues; disputes on sharing of water resources.

Unit V 9 Hours

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

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## **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.
- Regional Planning in IndiaIndiaV.K PuriJagdish Singh
- Economic Geography of India
   Kamlesh Paliwal

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

#### **PAPER II**

### **GEO-402**

## **HUMAN GEOGRAPHY-II**

Max. Marks: 100 Teaching Hours: 45 Hours (3Hrs/Week) Credits: 3

**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.

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.

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## **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 Geograpahy J.M Rubenstem 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 & Tclaff, 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 Teaching Hours: 60 hours (4Hrs/Week)

Credits:2

**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
- Bodwich Method

Merits and Demerits of this survey.

## **Meteorological Instruments:**

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

### **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

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

#### PAPER I

### **GEO-501**

## **EVOLUTION OF GEOGRAPHICAL THOUGHT**

Max. Marks : 100 Teaching Hours : 45 Hours (3Hrs/Week)

Credits:3

**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, Concept of Ecology.

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- 1. Hartshorne, Richard : The Nature of Geography (Annals of American Geographers 1939-1947).
- 2. Hartshorne, Richard : Perpesctive on the Nature of Geography, John Murry, London.
- 3. Taylor, Grffith (Ed.): Geography in the Twenieth Century, New York, 1951.
- 4. Jones, Clarence F.(Ed.): Inventory and Prospects, Syracause, 1945.
- 5. Jones, Prestone 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. Wooldrige, 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 Intenational Geogrphical 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, MacMilan & Co. London, 1967.
- 15. Wadia, Mahar and Wadia, D.N. Minerals of India, National Book Trust, New Delhi, 1966.
- 16. Wolldridge, S.W.: Geography as a Scienntst.

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

#### PAPER II

#### **GEO-502**

### WORLD GEOGRAPHY-I

Max. Marks: 100 Teaching Hours: 45 Hours (3Hrs/Week) Credits:3

**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.

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## **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.l Guha and Pr. Chatterjee
- Economic Geography and Commercial Geography R.N Dubey and L.R Singh
- Economic GeographyS,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 **Teaching Hours:** 60 hours (4Hrs/Week)

Credits:2

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

**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

An Introduction to the study of Map projections,

Maps and Diagrams

Statistical Methods in Geographical Studies

Working with Maps

John Wiley and A.Robinson J.A Steers 1965, London. F.J Monkhouse, Methuren Co

Lmtd, London

A. Mahmood, Rajesh Publications, Delhi

K.K Gupta and V.C Tyagi Survey of India DST, New Delhi.

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### **B.A/B.Sc SEMISTER VI**

#### PAPER I

#### **GEO-601**

## **GEOGRAPHICAL METHODOLOGIES**

Max. Marks: 100 Teaching Hours: 45 Hours (3Hrs/Week) Credits:3

**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.

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## **Essential Readings**

Political Geography
 Social Geography
 Regional Planning
 Political Geography
 Social Geography
 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 Chatterjjee

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

**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, Hydroelectricity. World potential and development, Atomic Energy.

Unit III 9 Hours

**World industries**— Location patterns and problems; patterns of world trade. Food and nutrition problems; 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 **major organizations** in shaping the world economy. Study of WTO, UNO, SAARC, SAFTA, ASEAN and other organizations of Asia .

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# **Essential Readings**

 Human and Economic Geography G.C Leong and Morgan, Oxford University Press, London.

Sansadhan BhoogolManav BhoogolMaurya

## **Reference Books**

Economic Geography
 J.l 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
 Gupta
 K.K Khannan and V.I

#### **B.A/B.Sc SEMISTER VI**

### **GEO-603**

## **PRACTICALS**

Max. Marks: 100 Teaching Hours: 60 hours (4Hrs/Week)

Credits:2

**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 Recommended**

## **Essential Readings**

Digital Remote Sensing
 P.Nag and M Kudrat

Practical GeographyPrayogik BhoogolR.L SinghJ.P Sharma

### **Reference Books**

Elements of Cartography
 Maps and Diagrams
 John Wiley and A.Robinson
 F.J Monkhouse, Methuren Co

Maps and Diagrams

F.J Monknouse, Methuren Co

Lmtd, London

■ Remote Sensing for Beginners P.K Gupta, Affiliated East

West press, Delhi
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.

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