

# *Cluster University Srinagar*

*Syllabus: Geography (For UG Programme)*

**B.A. /B.Sc. I<sup>st</sup> Semester**

**A. Theory-4 Credits**

**60 Marks**

***Title: Elements of Physical Geography***

## **Credit/Unit-I**

1. Physical Geography and its various branches
2. Structure of Earth's interior- Seismographic evidence and analysis
3. Continental Drift Theory- Wegener's concept
4. Sea floor spreading and Plate Tectonics-Geometry of Plates
5. Earthquakes: origin, types and distribution

## **Credit/Unit-II**

1. Rocks: major classification, origin and general characteristics
2. Weathering: factors, types and effects
3. Soil: process of formation, major types and distribution
4. Landforms and their formation : fluvial and karst
5. Landforms and their formation : glacial and aeolian

## **Credit/Unit-III**

1. Climatology: definition, scope and significance
2. Composition and Structure of atmosphere (Thermal)
3. Insolation: factors, global heat budget
4. Atmospheric pressure, Winds: major classification (planetary, periodic and local), cyclones and anti-cyclones
5. Jet Streams and El-Nino

## **Credit/Unit-IV**

1. Surface configuration of ocean floors
2. Temperature and Salinity: horizontal and vertical distribution
3. Coral reefs: origin, types and distribution
4. Movement in ocean waters- tides: origin and types,
5. Movement in ocean waters- currents: origin and types,

### **Suggested Readings**

1. Singh, S.: Geomorphology, Prayag Pustakalaya, Allahabad, 1998.
2. Sparks, B.N.: Geomorphology, Prayag Pustakalaya, Allahabad, 1998
3. D. S. Lal, Physical Geography, Sharda Pustak Bhawan, 2009
4. Savindra Singh, Physical Geography, Prayag Pustak Bhawan, 2000
5. Majid Hussain, Physical Geography, Anmol Publications Pvt. Ltd., 2007
6. S. A. Qazi, Principals of Physical Geography, AHP Publishing Co. 2004
7. Satopa Mukherjee, Understanding Physical Geography, Oriental Longman 2002
8. A. H. Strahler & A. N. Strahler, Modern Physical Geography, John Willy & sons, Inc. 2001.
9. Barry, R. G & Chorley, R.J., Atmosphere, Weather and Climate Routiedge, 1998.
10. Critchfield, H, General Climatology, Prentice Hall, New York, 1975.
11. Stringer, E.T Foundation of Climatology, Surjeet Publication, Delhi, 1982.
12. Grald, S, General Oceanography- An Introduction, John Wiley & Sons, New York, 1980.
13. King, C.A.M., Oceanography for Geographers, E Arnold, London, 1975.
14. Paul R, Pinet, Oceanography, Jones and Bartelett Publishers, 1998

**B. Practical-2 Credits****30 Marks*****Title: Cartography-I*****Credit/Unit-I**

1. Map: definition, importance and essentials
2. Scale: definition and ways of expressing scale
3. Graphical scale: importance, construction of plain, diagonal and comparative scales
4. Contours: representation of different landforms and slopes by contours

**Credit/Unit-II**

1. Profiles: drawing simple, serial, longitudinal and superimposed profiles
2. Line graph and bar graph: drawing of simple and compound line and bar graphs
3. Cartographic symbols: types, use of point and area symbols to represent distribution and density of population
4. Digital cartography: definition, scope and application

**Suggested Readings**

1. Robinson, A.H et al., Elements of Cartography, John Wiley & Sons, U.S.A., 1995.
2. Sarkar, A.K., Practical Geography: A Systematic Approach, Oriental Longman, Calcutta, 1997.
3. Singh, R.L and Dutt, P.K., Elements of Practical Geography, Kalyani Publishers New Delhi, 1979.
4. Gopal Singh, Map World and Practical Geography, Vikas Publishing House, 2000.
5. Kali Charan Sahu, Textbook of Remote Sensing and Geographic Information System, Atlantic Publishers and Distributors, 2008.
6. Khullar, D.R., Essentials of Practical Geography, New Academic Publishing Co., Jalandhar, 2013.

**B.A./B.Sc. 2<sup>nd</sup> Semester**

**A. Theory-4 Credits**

**60 Marks**

***Title: Philosophies and Methodologies in Geography***

**Credit/Unit –I**

1. The nature of Geography- A brief overview
2. Relevance and objectives of Geography
3. Major themes in Geography:
  - i. Aerial Differentiation
  - ii. Man-Environment Interaction
  - iii. Spatial Organisation
4. Dualism in Geography
  - i. Regional/Systematic
  - ii. Physical/Human
  - iii. Historical/Contemporary

**Credit/Unit –II**

1. Contribution of Phoenicians and Greeks in Geography
2. Contribution of Romans in Geography, Dark age and its impact
3. Contribution of Arabs in Geography
4. Schools of Thought: German school

**Credit/Unit –III**

1. Ecology: definition, scope and significance
2. Ecosystem: concept and broad types
3. Biodiversity: concept, significance and conservation
4. Ecological imbalances: causes and consequences

**Credit/Unit –IV**

1. Quantitative techniques and their relevance in geography
2. Quantitative revolution in geography, it's relevance and impact
3. Geomorphic field survey: significance and procedure
4. Socio-economic field survey: significance and procedure

### **Suggested Readings**

1. Dikshit R D: Geographical Thought -A contextual History of Ideas. Prentice Hall India, New Delhi, 2000.
2. Hartshorne, Richard: Perspectives on the Nature of Geography, Rand McNally and Co., Chicago. 1959.
3. Harvey, David: Explanation in Geography, Edward - Arnold London, 1972.
4. Husain, Majid: Evolution of Geographical Thought, Rawat Publications, Jaipur, 1984.
5. James, P E: All Possible Worlds: A History of Geographical Ideas, Sachin Publication, Jaipur, 1980.
6. A.H. Strahler & A.N. Strahler, Modern Physical Geography, John Willy & sons, Inc 2001.
7. M. Z. A. Khan & S.K. Agarwal, Environmental Geography, AHP Publishing Co.2010.
8. S. Gupta & M. Gupta, Environmental Population and Resources, 1997.

**B. Practical-2 Credits****30 Marks*****Title: Surveying*****Credit/Unit-I**

1. Field surveying: introduction, classification and types
2. Plane table survey: accessories, procedure and precautions
3. Plane table survey: radiation, intersection and resection methods(actual field survey)

**Credit/Unit-II**

1. Study of General Topographic sheets of Survey of India
2. Interpretation of General Topographic sheets: relief, drainage, settlement and communication
3. One day Geomorphic field trip and report writing

**Suggested Readings**

1. Robinson, A.H et al., Elements of Cartography, John Wiley & Sons, U.S.A., 1995.
2. Sarkar, A.K., Practical Geography: A Systematic Approach, Oriental Longman, Calcutta, 1997.
3. Singh, R.L and Dutt, P.K., Elements of Practical Geography, Kalyani Publishers New Delhi, 1979.
4. Gopal Singh, Map World and Practical Geography, Vikas Publishing House 2000.
5. Kali Charan Sahu, Textbook of Remote Sensing and Geographic Information System, Atlantic Publishers and Distributors 2008.