B.A. /B.Sc. Ist Semester

A. Theory -4 Credits **60 Marks**

GG-CR-17101 Title: Elements of Physical Geography

Credit: 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: 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: 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: 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**

GGP-CR-17101 ***Title: Cartography-I***

Credit: 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: 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.