

**SOLAPUR UNIVERSITY, SOLAPUR**

**FACULTY OF SCIENCE**

**Credit Based PATTERN SYLLABUS**

**Geography**

**B. Sc. semester I & II**

**(W.e.f. June 2014)**

SOLAPUR UNIVERSITY, SOLAPUR.  
Credit Based Semester Pattern Syllabus  
Sub – Geography  
Class – B.Sc. Part – I  
SEMESTER – I Paper I  
Name of the Paper :- GEOMORPHOLOGY

Code No:- SG -1  
Course No : SOG-101-S-1

Total Lectures : 60  
Total Marks: 70+30=100  
No of Credit : 04

Objectives :-

- 1) Introduce new concept from Physical Geography.
- 2) Give the knowledge about those concepts to the students.
- 3) Give the basic knowledge about disasters occurred at different places of earth.

Section - I

Unit No.	Contents	Total Lectures
1	Meaning & Definition – Nature & Scope Importance of Geomorphology.	05
2	a) Origin of the Earth – Introduction –chamberolin’s Hypothesis, James & Jeans Tidal Hypothesis- Rusell’s Binary Star Hypothesis. b) Interior of the Earth view of different scholars about the Interior of the earth.	10
3	a) Earth Movements-Orogenic , Eperogenic causes and effects with example. b) Study of Earthquake & Volcanoes as disasters-causes – effects and their distribution.	10
4	Rocks – Origin – Classification/Types & characteristics of rocks.	05

Section - II

Unit No.	Contents	Total Lectures
1	Weathering of Rocks – Types – Effects of weathering.	05
2	Concept of cycle of erosion- River & Winds – Land Forms – associated with them – Impact of landforms on agriculture and transport .	05
3	Study of Soil – Meaning – origin of Soil – process of formation of soil – Soil types on basis of colour, Texture, Structure	10
4	Fertility of Soil – Contents of the soil – Main plant – nutritive elements in the soil – (N.P.K.) & study of total soluble salts (TSS) & Hydrogen ion concentration (PH) & their effect on soil fertility	10

## List of Reference Books

1. Chorley R. L. :- Spatial Analysis in Geomorphology, Meathum, Londen 1972.
2. Cooke R. U. & Doornkamp J. C. :- Geomorphology in Environmental Management An introduction clavendon, Oxferd, 1974.
3. Dayal P. A. :- Text book of Geomorphology, Shukla Book Depot, Patna, 1996.
4. Fair Bridge R. W. :- Encyclopedia of Geomorphology, Reinholots, New York, 1968.
5. Kale V. & Gupta A. :- Elements of Geomorphology, Oxford University press Calcutta.
6. Pitly A. F. :- Introduction of Geomorphology, Meathum. London 1974.
  
7. Singh S. :- Geomorphology, Prayag Pustakalay, Allahabad, 1998.
8. Spark B. W. :- Geomorphology, Longman, London, 1960.
9. Chorley R. J. :- Spatial Analysis in Geomorphology, Meathum, London1972.
10. Coole R. U. & Doornkamp J. C. :- Geomorphology in Environmental Management An introduction clavendon, Oxferd,1974.
11. Dayal P. A. :- Text book of Geomorphology, Shukla Book Depot, Patna.1996.
12. Fair Bridge R. W. :- Encyclopedia of Geomorphology, Reinholots, New York,1968.
13. Kale V. & Gupta A. :- Elements of Geomorphology, Oxford University Press, Calcutta.
14. Pitly A. F. :- Introduction of Gemorphology, Meathum, London 1974.
15. Singh S. :- Geomorphology, Prayag Pustakalay, Allahabad, 1998.
16. Spark B. W.:- Geomorphology, Longman, Londen,1960.
17. Thornbury W. D. :- Principal of Geomorphology, Waley Estern, 1969.
18. Woodridge S. W. & Morgen R. S. :- The physical basis of Geography an out time of Geomorphology, Longman Green & Coup London, 1954.

SOLAPUR UNIVERSITY, SOLAPUR.  
 Credit Based Semester Pattern Syllabus  
 Sub – Geography (Optional)  
 Class – B.Sc. Part – I  
 SEMESTER – II  
 Name of the Paper :- CLIMATOLOGY  
 PAPER – II

Code No:- SG -I  
 Course No : SOG-101-S-II

Total Lectures : 60  
 Total Marks: 70+30=100  
 No of Credit : 04

Objectives :-

- 1) Make the students familiar with new Terms & concepts of climatologic study.
- 2) To know the constituents of atmosphere & its dynamic nature.
- 3) To know the contribution of atmosphere in making the Earth habitable & consequences of human activities on atmospheric process.

Section - I

Unit No.	Contents	Total Lectures
1	Definition – Nature, Scope and Importance of Climatology. Study of Atmosphere – Composition & Structure- Homosphere, heterosphere, Magnetic Storms Weather & Climate – Meaning – difference – elements of weather – factors affecting on climate, weather and Major role in living habitation on earth	10
2	Insolation – Meaning – Solar constant- factors affecting the insolation – distribution Global– Heat Budget on earth- Temperature – factors affecting its distribution – vertical & Horizontal Distribution.	05
3	Atmospheric pressure, pressure Belts on the Earth. Winds associated with pressure belts. Meaning of cyclones & its types Important Cyclones on the earth – Hurricanes & Typhoons - atmospheric conditions associated with them – Methods of naming cyclones. Importance of pressure for human life and his activities.	10

## Section - II

Unit No.	Contents	Total Lectures
1	Definition – Nature, importance of Oceanography – surface configuration of ocean floors – coasts- Importance of coasts for harbor development	10
2	Temperature & salinity of ocean waters- Factors affecting the distribution of temperature & salinity of ocean waters.	10
3	Circulation of ocean waters – development of waves, tides & ocean currents – Important ocean currents in the world. Economic significance of tides and ocean currents Cyclone development favorable oceans and there distribution in the world. Ocean deposits & coral reefs – types & theories.	10

## Section - III Geography Practical

Unit No.	Contents	Total Lectures
4 i	Cartography : Definition of Map – Classification of Map. Introduction and importance of Remote Sensing and Types of Aerial photography.	02
4 ii	Scales : Methods of expression of scale. Construction of plain scale, Time and distance scale. (Only metric system)	02
4 iii	Methods of representation of Relief : Spot Height Bench Mark, Tring point and contours. Representation of various landforms with the help of countours hill, Valley, Pleatu, Cliffs, Waterfall. Slopes : Methods of expression of slopes, Gradient , Degree, Percentage & Mills.	03
4 iv	A) Rrepresentation of climatic data by Graps and Diagrams a) Line graph – Simple and Multiple b) Bargraph c) Line and Bar graph d) Climograph & Hythergraph e) Star Diagram / Windrose B) Weather Instruments Construction, Mechanism & use of a) Thermograph b) Barograph c) Wet & Dry Bulb Tetrameter d) Theoretical process of soil testing in laboratories.	03

## List of Reference Books

1. Berry R.G. & Chorely P. J. :- Atmosphere, Weather and Climate, Rouledge Longman & New York,1998.
2. Critchfield J. H. :- General Climatology, Printice Hall India, New Delhi,1993
3. Lal D. S. :- Climatology, Chaitan publication, 1986.
4. Mathur G. R. :- Climatology Mc Graw Hill New York.
5. Miller A. :- Climatology.
6. Triwartha G. T. :- An introduction to Climate, International Studies Edition, Mc. Graw Hill, New York1997.
7. Thomason R. D. & Perry A. :- Applied Climatology, Principal and Practice, Routedge London.1997.
8. Majid Hussain :- Physical Geography, Rawat Publication, Jaipur.
  
9. Hussain M Climatology & Oceanography.  
10. Davis Richard J. A. Oceanography – An introduction To The Marine Environment. WMC Broth Flowa, 1987.
11. Temperature: Factors effecting on distribution
12. Gral S : General Oceanography – An introduction Johan Waley & Sons, New York.
13. Garrison T:- Oceanography Warelswarth Company U.S.A. 1998.
14. Majid Hussain :- Physical Geography, Rawat Publication, Jaipur.
15. Sharma R. C. & Vatel M : Oceanography For Geographer, Chetanya Publishing House , Allahabad,1970.
16. K.Bharadwaj : Physical Geography, Oceanography. Discovery publishing House New Delhi (2006)
17. Map work & Map Reading - Shri. Kumbhar
18. Elements of Practical Geography – Singh R.L.
19. Map and Diagrams - Monkhouse F.J.R.

