Department of Geography Osmania University

B.A. / B.Sc. CBCS Common Core Syllabi for All Universities in Telangana (w.e.f 2016-17)

SCHEME FOR CHOICE BASED CREDIT SYSTEM IN	
B.A./B.Sc. PROGRAMME IN GEOGRAPHY	

FIRST YEAR / SEMESTER -I

Code	Course Title	Course Type	HPW	Credits
BS104	Elements of Geomorphology	DSC-1A	4T	4
	Practical-I: Elements of		2P	1
	Mapping and Interpretation			
			06	5

SEMESTER-II

Code	Course Title	Course Type	HPW	Credits
BS204	Elements of Climatology &	DSC-1B	4T	4
	Oceanography			
	Practical-II: Basic Statistics and		2P	1
	weather Map			
			06	5

B.A./B.Sc (Programme) Geography, Osmnia University

Discipline Specific Core (DSC) Course (6 Compulsory Papers)

Semester I

1. Elements of Geomorphology (4 Credits)
Elements of Mapping and Interpretation (practical) (1 Credit)

Semester II

2. Elements of Climatology & Oceanography (4 Credits) Basic Statistics and Weather Map (practical) (1 Credit)

B.A. / **B.Sc.** GEOGRAPHY FIRST YEAR

SEMESTER-I

(BS104) Paper I: ELEMENTS OF GEOMORPHOLOGY (4 Credits)

Unit-1: Earth Dynamics

- 1. Land and Sea : Formation and distribution.
- 2. Theories: Isostasy, Continental Drift, Plate Tectonics.

Unit-2: Earth Dynamics

- 3. Interior of Earth Earthquakes Volcanoes Rocks.
- 4. Weathering and Mass-wasting.

Unit-3: Geomorphology - Processes and Landform Development.

- 5. River: Flow and Work- erosion, transportation, deposition landforms.
- 6. Wind: Air flow and Work- erosion, transportation, deposition- landforms desert formations.
- 7. Marine: Waves and Currents and Work- erosion, transportation, deposition shoreline and landforms.

Unit-4: Geomorphology

- 8. Karst: Flow of Underground water and Work- solutions- erosion and deposition landforms.
- Glacial: Types, Movements and Work- erosion, transportation and depositionlandforms.

Basic Texts:

- 1. Critchfield (1997): General Climatology, Prentice Hall of India, New Delhi.
- 2. Strahler A. H. and Strahler A. N. (1971): Physical Geography, Willey eastern, New Delhi
- 3. Trewartha (1968): An Introduction to Climate, Mc Graw Hill, New Delhi.

Additional Texts:

- 1. Tikka R. N. (1999): Physical Geography, Kedarnath & Ramnath & Co., Meerut.
- 2. Dasgupta and Kapoor (1998): Physical Geography, Chand & Co., Delhi.
- 3. Lal, D. S. (1996): Climatology, Chaitanya Publishing House, Allahabad.
- 4. Savinder Singh (2013): Geomorphology, Prayag Pustak Bhavan, Allahabad.
- 5. Sparks B. W. (1965): Geomorphology, Brill Academic Publishers.

Practical-I: <u>ELEMENTS OF MAPPING AND INTERPRETATION</u>

(1 Credit)

- 1. Types of Maps: Cadastral, Topographical, Atlas, General Maps, Thematic Maps.
- 2. Construction of scale: simple, diagonal and comparative.
- 3. Relief features of geological landforms and profile drawing (serial, superimposed, projected and composite).
- 4. Map reading and Interpretation of topographical sheets.

Basic Texts

- 1. Monkhouse F. J. and Wilkinson H. R. (1968): Maps and Diagrams, Methuen, London.
- 2. Mishra R. P. and Ramesh A. (1999): Fundamentals of Cartography, Mac Millan, New Delhi.

Additional Texts

- 1. Gopal Singh (1996): Map Work and Practical Geography, Vikas Publishing House, New Delhi.
- 2. Singh R. L. and Dutt P.K. (1968): Elements of Practical Geography, Students Friends, Allahabad.
- 3. Negi B. S. (1998): Practical Geography, Kedarnath and Ramnath, Meerut.

SEMESTER -II

(BS204) Paper II: <u>ELEMENTS OF CLIMATOLOGY & OCEANOGRAPHY</u>

(4 Credits)

Unit-I:

- 1. Atmosphere Structure and Composition.
- 2. Insolation Factors influencing the incidence and distribution.
- 3. Temperature Horizontal and Vertical Distribution.
- 4. Pressure Influencing factors- High and Low Pressure Areas, Global Pressure Belts.

Unit-II:

- 5. Winds Local, Periodic and Planetary; El Niño and La Niña.
- 6. Cyclones Formation, Distribution and Impacts: Tropical and Temperate.
- 7. Humidity Absolute and Relative.
- 8. Clouds Types, Formation and Potentials Precipitation: Types, Formation and Distribution.

Unit-III:

- 9. Submarine relief: Continental Shelf, Continental Slope, Abyssal Plain, Ocean Deeps and Trenches, Mid-Oceanic ridges.
- 10. Temperature: Horizontal and Vertical Distribution.
- 11. Salinity: Factors and Distribution.

Unit-IV:

- 12. Waves & Tides: Types and Formation.
- 13. Ocean Currents: Types and Factors Responsible Currents of Atlantic, Pacific and Indian Oceans.
- 14. Ocean deposits: Types and Distribution.
- 15. Marine Resources and their economic significance.

Basic Texts:

- 1. Cole and King (1975): Oceanography for Geographers, E. Arnold, London.
- 2. Ken Briggs (1985): Physical Geography: Process and System, Holder and Stoughton, London.
- 3. Rice R. J. (1996): Fundamentals of Geography Addission Wesley.
- 4. Sharma, R. C. and Vatal M. (1997): Oceanography for Geographers, Chaitanya Publishing House, Allahabad.

Practical-II: <u>Basic Statistics and Weather Map</u> (1 Credit)

- 1. Sources of data; classification and Tabulation of data.
- 2. Central Tendencies Mean, Median and Mode
- 3. Measures of Dispersion Mean Deviation and Standard deviation
- 4. Correlation (Karl Pearson and Spearman).
- 5. Weather Map: Weather symbols and Interpretation of Indian daily weather maps (July, October and January).

REFERENCES:

- 1. Aslam Mohmood: Statistical Methods in Geographical Studies. Rajesh Publication, New Delhi.
- 2. Singh, L.R. (2006): Practical Geography, Sharada Pustak Bhavan.
- 3. Gregory, S (1963): Statistical Methods and the Geographer, Longmans, London
- 4. King, L.J.: Statistical Analysis in Geography, Prentice Hall, Englewood Cliffs, New Jersey.
- 5. Zamir, A. (2002): Statistical Geography: Methods and Applications, Rawat Publications, Jaipur.
- 6. Monkhouse, F. J. and Wilkinson, F.J. (1985): Maps and Diagrams. Methuen, London
- 7. Sarkar, A. K. (1997): Practical Geography: A Systematic Approach. Orient Longman, Kolkata.