#### B.A.(Liberal Arts) CORE COURSE (CC) : GEOGRAPHY SEMESTER-I (BLAB31107T ) CLIMATOLOGY AND OCEANOGRAPHY

MAX. MARKS: 100 EXTERNAL: 70 INTERNAL: 30 PASS: 40% Credits:2

#### **OBJECTIVE:**

This course acquaints the students with the basic principles of Microeconomics and economic activities. It will help the students to understand the subject by applying it to their day to day experiences.

#### **INSTRUCTIONS FOR THE PAPER SETTER/EXAMINER:**

- 1. The syllabus prescribed should be strictly adhered to.
- 2. The question paper will consist of three sections: A, B, and C. Sections A and B will have four questions from the respective sections of the syllabus and will carry 10 marks each. The candidates will attempt two questions from each section.
- 3. Section C will have fifteen short answer questions covering the entire syllabus. Each question will carry 3 marks. Candidates will attempt any ten questions from this section.
- 4. The examiner shall give a clear instruction to the candidates to attempt questions only at one place and only once. Second or subsequent attempts, unless the earlier ones have been crossed out, shall not be evaluated.
- 5. The duration of each paper will be three hours.

#### INSTRUCTIONS FOR THE CANDIDATES

Candidates are required to attempt any two questions each from the sections A and B of the question paper and any ten short questions from Section C. They have to attempt questions only at one place and only once. Second or subsequent attempts, unless the earlier ones have been crossed out, shall not be evaluated.

## **SECTION A**

Unit I:	Origin of the Earth- Nebular, Tidal and Big Bang Theory; Internal Structure of the Earth.
Unit II:	Isostasy-Concept of Airy and Pratt, Wegener's Continental Drift Theory, Plate Tectonics.
Unit III:	Earth Movements: Orogenic and Epeirogenic, Earthquakes and Volcanoes.
Unit IV:	Geomorphic Processes: Weathering and Erosion
Unit V:	Evolution of Landforms: Fluvial, Arid, Karst, and Glacial Topography.

# **SECTION B**

Unit VI:	Composition and Structure of the Atmosphere, Insolation, Humidity and
	Precipitation.
Unit VII:	Concept and Types: Air Masses and Fronts; Cyclones: Tropical and Temperate.
Unit VIII:	Classification of Climate: Koppen's; Climatic Changes: Causes and Evidences.
Unit IX:	Relief of the Ocean floor: Continental Shelf, Slope and Deep-Sea Plain; Relief of the
	Indian and Atlantic Oceans.
Unit X:	Salinity of Ocean Water; Ocean Currents; Tides

### **Suggested Readings:**

- Bloom A. L., (2003) Geomorphology: A Systematic Analysis of Late Cenozoic Landforms, Prentice-Hall of India, New Delhi.
- Bridges E. M., (1990) World Geomorphology, Cambridge University Press, Cambridge.
- Christopherson, Robert W., (2011) Geosystems: An Introduction to Physical Geography, 8 Ed., Macmillan Publishing Company
- Dayal, P., A Text Book of Geomorphology, Rajesh Publication, New Delhi.
- Skinner, Brian J. and Stephen C. Porter (2000), The Dynamic Earth: An Introduction to physical Geology, 4th Edition, John Wiley and Sons, US.
- Thornbury W. D., (1968) Principles of Geomorphology, Wiley, US.
- Gautam, a (2010): Bhautik Bhugol, Rastogi Publications, Meerut.
- Singh, S (2009):Bhautik Bhugol ka Swaroop, PrayagPustak,Allahabad
- Barry R. G. and Carleton A. M., (200) Synoptic and Dynamic Climatology, Routledge, UK.
- 10.Critchfield H. J., (1987) General Climatology, Prentice-Hall of India, New Delhi.
- Lutgens F. K., Tarbuck E. J. and Tasa D., (2009) The Atmosphere: An Introduction toMeteorology, Prentice-Hall, Englewood Cliffs, New Jersey.
- Oliver J. E. and Hidore J. J., (2002) Climatology: An Atmospheric Science, Pearson Education, New Delhi.
- Trewartha G. T. and Horne L. H., (1980) An Introduction to Climate, McGraw-Hill, US.
- Gupta L. S., (2000) Jalvayu Vigyan, Hindi MadhyamKaryanvayNidishalya, Delhi Vishwa Vidhyalaya, Delhi.
- Vatal, M., (1986) Bhautik Bhugol, Central Book Depot, Allahabad.
- Singh, S (2009): Jalvayu Vigyan, PrayagPustak Bhawan, Allahabad.