

**2023**  
**B.A./B.Sc.**  
**First Semester**  
CORE – 1  
**GEOLOGY**  
*Course Code: GLC 1.11*  
(Earth System Science)

*Total Mark: 70*  
*Time: 3 hours*

*Pass Mark: 28*

*Answer five questions, taking one from each unit.*

**UNIT-I**

1. Explain the different hypothesis for the origin of the earth. 14
2. Write notes on the following: 7×2=14
  - (a) Earth's magnetic field
  - (b) Terrestrial and jovian planets

**UNIT-II**

3. Define volcanoes. Discuss about its types and products. 14
4. Write a note on the following: 7×2=14
  - (a) Mid oceanic ridges
  - (b) Island arcs

**UNIT-III**

5. Explain with a neat schematic sketch the earth's heat budget. 14
6. Write notes on *any two* of the following: 7×2=14
  - (a) Coriolis effect
  - (b) Concept of eustasy
  - (c) Greenhouse effect

## UNIT-IV

7. Discuss in detail the major geomorphic divisions of India. 14
8. Write notes on the following: 7×2=14
- (a) Radiometric dating of rocks
  - (b) Laws of superposition and faunal succession

## UNIT-V

9. Explain the distribution of elements in the solar system and on the earth. 14
10. Write notes on the following: 7×2=14
- (a) Chemical differentiation and composition of the Earth
  - (b) Isotopic fractionation
-