

2022
B.A./B.Sc.
First Semester
CORE – 1
GEOLOGY
Course Code: GLC 1.11
(Earth System Sciences)

Total Mark: 70

Pass Mark: 28

Time: 3 hours

Answer five questions, taking one from each unit.

UNIT-I

1. Explain with neat sketch the internal structure of the earth. 14
2. Explain the following: 7×2=14
 - (a) Branches of geology
 - (b) Formation of atmosphere and hydrosphere

UNIT-II

3. Explain in detail the concept of continental drift and seafloor spreading. 14
4. Write notes on the following: 7×2=14
 - (a) Earthquake
 - (b) Trench

UNIT-III

5. What is atmospheric circulation? Explain the tricellular model of atmospheric circulation. 4+10=14
6. Write notes on the following: 7×2=14
 - (a) Earth's heat budget
 - (b) Salinity of sea water

UNIT-IV

7. Discuss in detail the nature of stratigraphic records. 14
8. Write notes on the following: 7×2=14
- (a) Geological timescale
 - (b) Concept of uniformitarianism and catastrophism

UNIT-V

9. Explain the concept of geochemical cycles and mass balance. 14
10. Explain the following: 7×2=14
- (a) Geochemical behaviour of major elements
 - (b) Mass conservation of element
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