

2022
B.A./B.Sc.
Third Semester
CORE – 7
GEOLOGY
Course Code: GLC 3.31
(Elements of Geochemistry)

Total Mark: 70
Time: 3 hours

Pass Mark: 28

Answer five questions, taking one from each unit.

UNIT-I

1. Explain the Goldschmidt classification of elements. 14
2. Write notes on the following: 7×2=14
 - (a) Octet rule of elements
 - (b) Covalent bonding of elements

UNIT-II

3. Explain in detail the concept of radioactivity with example. 14
4. Write notes on the following: 7×2=14
 - (a) Half life
 - (b) Geochronology

UNIT-III

5. Explain in detail the concept of delta notation in stable isotope geochemistry studies. 14
6. Write notes on the following: 7×2=14
 - (a) Eccentricity of Earth
 - (b) Stable isotope and its scope

UNIT-IV

7. Define meteorites. Mention its classification and characteristics. 14
8. Write notes on the following: 7×2=14
- (a) Geochemical variability of magma
 - (b) Composition of the bulk silicate Earth

UNIT-V

9. Explain the geochemical behaviour of the following: 7×2=14
- (a) Iron
 - (b) Silicon
10. Explain the geochemical behaviour of the following: 7×2=14
- (a) Aluminium
 - (b) Potassium
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