

This question paper contains 2 printed pages]

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S. No. of Question Paper : 1720

Unique Paper Code : 219606

C

Name of the Paper : ET-4 : Introduction to Geochemistry

Name of the Course : B.Sc. (Hons.) Geology

Semester : VI

Duration : 3 Hours

Maximum Marks : 75

*(Write your Roll No. on the top immediately on receipt of this question paper.)*

### Instructions for candidates

Answer any *Five* questions.

*All* questions carry equal marks.

1. Discuss geochemical classification of elements. Comment upon atomic environment of elements and different types of reservoirs.
2. Write short notes on any *two* of the following :
  - (a) Radiogenic tracers
  - (b) Elemental Fractionation
  - (c) Be<sup>10</sup> dating.
3. What do you understand by element transport ? Explain its application in thermometry and barometry.

P.T.O.

4. Write short notes on any *two* of the following :
  - (a) Chromatography
  - (b) Diagenesis
  - (c) Hydrothermal reactions.
5. Discuss in detail about the geochemical differentiation of the Earth.
6. Write short notes on the following :
  - (a) Partition Coefficient
  - (b) Rayleigh fractionation
  - (c) Chondrite.
7. Explain geochemical behaviour of Na in primary and secondary environments.
8. Write short notes on the following :
  - (a) K electron capture
  - (b) Atomic structures in silicate melts
  - (c) CIA.