

Roll No. ....

Total Pages : 2

**CMDQ/M-24**

**5575**

**APPLIED GEOCHEMISTRY**

Paper–GT–604

Time Allowed : 3 Hours]

[Maximum Marks : 100

**Note** : Attempt **five** questions in all, selecting **one** question from each Unit. Question No. **1** is compulsory. All questions carry equal marks.

**Compulsory Question**

1. Write notes on the following :
  - (a) Distribution of Elements in sedimentary rocks.
  - (b) Equilibrium kinetics.
  - (c) Radiogenic and stable isotopes.
  - (d) Geochemical surveys.

**UNIT-I**

2. Discuss about the internal division and differentiation of Earth.
3. (a) Surface chemistry and its significance.  
(b) Colloids in sedimentary conditions.

**UNIT-II**

4. What is the application of Thermodynamics in geology?
5. (a) Mineral equilibria and its significance.  
(b) Chemical thermodynamics.

**UNIT-III**

6. Discuss about the Geochemical reactions related to sedimentation process.
7. (a) Isotopic systematics.  
(b) Inorganic geochemistry.

**UNIT-IV**

8. Describe about the analytical techniques being used for rock composition.
9. (a) Mineral exploration and its techniques.  
(b) Chemical parameters of Water.