

Roll No.

Total Pages : 2

CMDQ/D-23

5215

MINERAL EXPLORATION

Paper–GT–702

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 Questions

1. Write notes on the following:

- (i) Tonnage.
- (ii) Planning of geochemical prospecting.
- (iii) Sampling in mineral exploration.
- (iv) Density and bulk density in reserve estimation.

UNIT-I

2. Discuss about the future opportunities in mineral exploration.

- 3. (a) Historical development in mineral exploration methods.
- (b) Early stage exploration.

UNIT-II

4. Describe the various geobotanical observations in geological prospecting.

- 5. (a) Structural controls of mineralization.
- (b) Soil sampling in geochemical prospecting.

UNIT-III

- 6. Explain the magnetic survey method of mineral prospecting.
- 7. (a) Geological plans.
- (b) Integration of geophysical data.

UNIT-IV

- 8. What are the factors affecting the reliability of reserve estimation?
- 9. (a) Reserve estimation based on square model.
- (b) GIS in mineral exploration.