

Roll No.

Total Pages : 2

CMDQ/D-23

5201

**IGNEOUS & METAMORPHIC
PETROLOGY**

Paper–G–303

Time allowed : 3 Hours]

[Maximum Marks : 75

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) Primary magma.
 - (ii) Chemical composition of Andesite.
 - (iii) AFM diagram.
 - (iv) Charnockites.

UNIT-I

2. What are the factors affecting the evolution of magma?
3. (a) Fo-An-SiO₂ system.
(b) Ab-An-Di system.

UNIT-II

4. What is the basis for classifying igneous rocks into their types?

5. (a) Petrogenesis of granites.
(b) Variation diagrams.

UNIT-III

6. Discuss about the nature of metamorphic reactions during metamorphism.
7. (a) ACF diagram.
(b) Schreinemakers rule.

UNIT-IV

8. Describe about the Ocean floor metamorphism with associated rock types.
9. (a) Gondites.
(b) Khondalites.