

Roll No. ....

Total Pages : 2

**CMDQ/M-24**

**5574**

## **METOMORPHIC PETROLOGY**

Paper–GT–603

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 short notes on the following :

- (a) Regional Metamorphism.
- (b) Phase rule in Metamorphic petrology.
- (c) Highest grade of Metamorphism.
- (d) Mineral paragenesis.

### **UNIT-I**

- 2. Discuss about the textural classification of metamorphic rocks.
- 3. (a) Dynamic metamorphism.  
(b) Physical and chemical properties of Marble.

### **UNIT-II**

- 4. Describe about the Graphical representation of various mineral assemblages in different P-T conditions.
- 5. (a) ACF diagram.  
(b) AFM diagram.

### **UNIT-III**

- 6. Discuss about the Petrogenetic grid for metamorphic assemblages in various grade of Metamorphism.
- 7. (a) Metamorphic isograds.  
(b) Thermodynamics of Metamorphic reactions.

### **UNIT-IV**

- 8. Describe about the Mineral assemblages in Amphibolite facies.
- 9. (a) Granulite facies.  
(b) Eclogite facies.