

Roll No. ....

Total Pages : 2

**CMDQ/M-24**

**5573**

## **STRUCTURAL GEOLOGY-II**

Paper-GT-602

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. Brief the following :
  - (a) Principle stresses.
  - (b) Buckling and bending.
  - (c) Sigmoidal structure.
  - (d) Primary and secondary foliations.

### **UNIT-I**

2. Discuss grain centre method for the analysis of strain.
3. Write notes on the following :
  - (a) Properties and Geological significance of Strain ellipsoids.
  - (b) Stress in homogeneous media.

### **UNIT-II**

4. What are Fractures? How do they form in the Earth's crust? Discuss the Geometry of Joints.
5. Write notes on the following :
  - (a) Morphological classification of folds.
  - (b) Internal strain accumulation.

### **UNIT-III**

6. What are shear zones? Discuss in detail.
7. Write notes on the following :
  - (a) Structure of the Himalaya.
  - (b) Geological significance of shear zones.

### **UNIT-IV**

8. Define the Superposed folds? Discuss techniques of structural analysis of superposed folding.
9. Write notes on the following :
  - (a) Compositional foliation.
  - (b) Mechanics of lineations.