

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.