

**2023**  
**B.A./B.Sc.**  
**Second Semester**  
CORE – 4  
**GEOLOGY**  
*Course Code: GLC 2.21*  
(Structural Geology)

*Total Mark: 70*  
*Time: 3 hours*

*Pass Mark: 28*

*Answer five questions, taking one from each unit.*

**UNIT-I**

1. Define topography. Give a brief description of topographic map and explain with diagram on representation of altitudes. 1+5+8=14
2. Write notes on the following: 7×2=14
  - (a) Any two rules of 'V' with diagram
  - (b) Contour lines and slope

**UNIT-II**

3. Explain stress and strain in rocks and their geological significance. 7+7=14
4. Write notes on the following: 7×2=14
  - (a) Dip and strike
  - (b) Planer and linear structures

**UNIT-III**

5. What is a fold? Explain with diagram fold morphology. 2+12=14
6. Write notes on the following: 7×2=14
  - (a) Bending and flexural slip folding
  - (b) Any two basis of geometric classification of fold

## UNIT-IV

7. Give an account on axial plane cleavage and its tectonic significance on foliation. 14
8. Write notes on the following: 7×2=14
- (a) Lineation and its origin
  - (b) Relation of lineation with foliation and folds

## UNIT-V

9. Explain the geometrical classification of faults with diagrams. 14
10. Write notes on the following: 7×2=14
- (a) Structures on fault surfaces
  - (b) Geometric classification of joints
-