## 2021 M.Sc.

## **First Semester**

CORE - 02

### **GEOLOGY**

Course Code: MGLC 1.21 (Structural Geology & Geodynamics)

Total Mark: 70 Pass Mark: 28

Time: 3 hours

Answer five questions, taking one from each unit.

### UNIT-I

1. Write an account on two dimensional stress analysis.

14

2. Write notes on any two of the following:

 $7 \times 2 = 14$ 

- (i) Concept and type of strain
- (ii) Viscous behaviour
- (iii) Confining pressure and temperature on behaviour of materials

#### UNIT-II

3. Explain the tectonics of thrust faults.

14

4. Write notes on:

 $7 \times 2 = 14$ 

- (i) Mechanics of buckling fold
- (ii) Cleavage types

#### UNIT-III

- 5. Discuss in detail the geological and geophysical evidences of continental drift.
- 6. Write short notes on:

 $7 \times 2 = 14$ 

- (a) Earth's interior
- (b) Wilson cycle

### **UNIT-IV**

- 7. What are supercontinental cycles? Explain in detail the fragmentation of Pangaea with special reference to Indian plate. 14
- 8. Write short notes on:

 $7 \times 2 = 14$ 

- (i) Rock magnetism
- (ii) Polar wandering

# UNIT-V

9. Write in detail the anatomy of Himalaya.

14

10. What is a craton? Discuss in detail the Dharwar Craton of India.

2+12=14