



## M.Sc. II Semester Degree Examination, October - 2023

### APPLIED GEOLOGY

#### Metamorphic Petrology

#### (NEP)

Time : 3 Hours

Maximum Marks : 70

**Note :** Answer **any five** of the following questions, each question carries **equal** marks.

1. Explain the following : **14**
  - (a) Concepts of metamorphic reactions
  - (b) Structure and texture of metamorphic rocks
2. Add a note on : **14**
  - (a) Phase rule and its applications
  - (b) AKF diagram
3. Answer the following : **14**
  - (a) Role of T, P and fluids in metamorphism
  - (b) Systematic description of regional and thermal metamorphism
4. Discuss the following : **14**
  - (a) Metamorphism of Olitic, basic-ultramafic and Calcareous rocks
  - (b) Metamorphism of Opiolites
5. Write a note on : **14**
  - (a) Schist and Slate
  - (b) Novaculite and Skarn
6. Explain the following : **14**
  - (a) Metamorphic differentiation and metasomatism
  - (b) Classification of metamorphic facies
7. Discuss the following : **14**
  - (a) Ocean floor metamorphism
  - (b) Continental collision
8. Write a short note on : **14**
  - (a) Gneiss
  - (b) Metamorphism
  - (c) Marble

