

**M.Sc. II Semester Degree Examination, October - 2023****APPLIED GEOLOGY****Igneous Petrology****(CBCS/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) Rock cycle
 - (b) General classification of igneous rocks
2. Add a note on : **14**
 - (a) Magmatic differentiation and nature of silicate melts
 - (b) Mid oceanic ridge volcanism
3. Answer the following : **14**
 - (a) Importance of Diopside
 - (b) Why Fosterite is an important ?
4. Discuss the following : **14**
 - (a) GIBBS phase rule and graphical representation
 - (b) SiO₂ phase diagram
5. Write a note on : **14**
 - (a) IUGS classification of igneous rocks
 - (b) Classification of Gabbroic rocks
6. Explain the following : **14**
 - (a) Deccan basalt
 - (b) Importance of Kimberlite
7. Discuss the following : **14**
 - (a) Tie line
 - (b) Ultramafic rocks
8. Write a short note on : **14**
 - (a) Anorogenic granites
 - (b) Mechanism of faults
 - (c) Igneous rocks

