



M.Sc. II Semester Degree Examination, Sept./Oct. - 2024

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. (a) Explain the nomenclature of common metamorphic rocks. 7
(b) Describe the structure of metamorphic rocks. 7
2. (a) Give a detailed account on AKF diagram. 7
(b) Describe the phase diagrams and phase rules with applications. 7
3. (a) Discuss the low-pressure and very high-pressure metamorphic facies. 7
(b) Discuss the role of temperature, pressure and fluids in metamorphism. 7
4. (a) Explain the metamorphism of olitic and calcareous rocks. 7
(b) Discuss the metamorphism related to opiolites. 7
5. (a) Give detailed account on importance of Gneiss and Phyllite. 7
(b) Give detailed account on importance of Novaculite and Skarn. 7
6. (a) Explain the metamorphic differentiation. 7
(b) Discuss the regional and thermal metamorphism. 7
7. (a) Discuss the ocean floor metamorphism. 7
(b) Describe the Quartzite with industrial applications. 7
8. Write short notes on :
 - (a) Open and Closed System. 5
 - (b) Metasomatism 5
 - (c) Gneiss 4

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