



**M.Sc. II Semester (CBCS) Degree Examination,
September/October - 2022**

APPLIED GEOLOGY

21APG2C6L : Metamorphic Petrology

Time : 3 Hours

Maximum Marks : 70

Note : Answer **any five** of the following questions with Question No.1 is **Compulsory**, each question carries **equal** marks.

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| 1. | (a) | What is metamorphism ? Describe the types of metamorphism. | 7 |
| | (b) | Add a note on structure and texture of metamorphic rocks with neat sketches. | 7 |
| 2. | | Give a detailed account on Application of phase rule in metamorphic petrology. | 14 |
| 3. | (a) | Describe the concept of metamorphic facies. | 7 |
| | (b) | Explain the role of fluids in metamorphism. | 7 |
| 4. | | Answer the following : | |
| | (a) | Regional Metamorphic facies | 7 |
| | (b) | Metasomatism | 7 |
| 5. | (a) | Write a detailed note on the grades of metamorphism. | 7 |
| | (b) | Describe the process of Metamorphic differentiation. | 7 |
| 6. | (a) | Write a note on chordates. | 7 |
| | (b) | Describe the mineralogy, texture and origin of amphibolites. | 7 |
| 7. | (a) | What is contact aureole and add a note on facies of contact metamorphism. | 7 |
| | (b) | Add a note on Ocean floor metamorphism. | 7 |
| 8. | | Write a note on : | |
| | (a) | Phyllite | 5 |
| | (b) | Gneiss | 5 |
| | (c) | Quartzite | 4 |

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