

No. of Printed Pages : 1

Sl. No.

76411



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

**APPLIED GEOLOGY
21APG2C5L : Igneous Petrology**

Time : 3 Hours

Maximum Marks : 70

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

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1. (a) Describe the rock cycle with a neat sketch. **7**
(b) Write a note on the internal structure of the Earth with a neat sketch. **7**
 2. (a) Explain the Bowen's reaction series. **7**
(b) Add a note on mid-oceanic ridges with a neat sketch. **7**
 3. (a) Define Gibbs rule with its graphical representation. **7**
(b) Discuss the two component system with example. **7**
 4. Answer the following :
(a) Anorthosites **5**
(b) Pegmatites **5**
(c) Carbonatites **4**
 5. (a) Explain the process of magmatic differentiation. **7**
(b) Add a note on types of igneous rocks with example. **7**
 6. Give a detailed account on IUGS classification of igneous rocks. **14**
 7. (a) Explain the concept of Tie line with examples. **7**
(b) Write a note on CIPW classification. **7**
 8. Write a note on :
(a) Deccan basalt **5**
(b) Melting behaviour **5**
(c) Lever rule **4**

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