

M6

5121

2008-2009
 M.Sc. (II SEMESTER) EXAMINATION
 APPLIED GEOLOGY
 IGNEOUS AND METAMORPHIC PETROLOGY
 (GLM-8005)

Maximum Marks: 70

Duration: Two Hours

Answer all the questions.
 Draw labelled neat sketches, if required.

1. ✓ Describe conditions and processes of the generation and evolution of magma(s) 8

OR

1. ✓ What is IUGS classification scheme? Give a detailed description of the classification of ultramafic rocks.

2. Write detailed notes on any three of the following: 17

- (a) Eutectic crystallization ✓
- (b) Inter growths and reaction rims
- (c) Spinifex texture
- (d) Petrogenesis of andesites

3. ✓ Give a detailed account of the metamorphic facies associated with subduction zone. 18

4. ✓ Give definition, significance and application of metamorphic facies series. 17

OR

4. ✓ How are P- T -t paths constructed? Discuss their geo-dynamic significance.