

AQ-921

M.Sc. (Part—I) Semester—II (CBCS Scheme)

Examination

GEOLOGY

Paper—V

(Igneous Petrology)

Time—Three Hours]

[Maximum Marks—80

Note :— (1) All questions are compulsory and carry equal marks.

(2) Draw neat sketches wherever necessary.

1. Write in detail about the various types of textures and their genetic significance.

OR

Describe in brief about the structures and their genetic significance.

2. Write in brief on the following :—

- (a) Niggili values
- (b) Johanson classification.

OR

- (c) Criteria for the classification of Igneous rocks
- (d) CIPW norms.

3. Write in brief on the following :—

- (a) Nature of magma.
- (b) Introduction to mantle petrology.

OR

- (c) Mantle metasomatism.
 - (d) Factors effecting magma.
4. Describe in detail the phase equilibrium of single silicate system and its relation to magma genesis.

OR

Give an account of phase equilibrium of binary silicate system and its relation to crystallization.

5. Write in brief on the following :—

- (a) Petrogenesis of ultramafic komatiites.
- (b) Petrogenesis of basalts.

OR

- (c) Petrogenesis of Granites.
- (d) Petrogenesis of Kimberlites.