

B.Sc. (CBCS Pattern) Sem-III
USGEOT05 : Geology Paper-I : Igneous Petrology

P. Pages : 2

Time : Three Hours



GUG/W/22/11608

Max. Marks : 50

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- Notes : 1. All questions are compulsory and carry equal marks.
2. Draw neat sketches wherever necessary.

1. Define petrology and describe concordant forms of igneous rocks with neat sketches.

OR

Write notes on the following:

- i) Ropy lava and Blocky lava.
- ii) Vesicular and Amygdaloidal structure

2. Define texture and give a brief account of textures in igneous rocks.

OR

Describe the following:-

- i) Mineralogical characteristics of acid igneous rocks.
- ii) Mineralogical characteristics of ultra basic igneous rocks.

3. Describe in details on composition and origin of magma.

OR

Write notes on the following:

- i) Discontinuous reaction series.
- ii) Continuous reaction series.

4. Give a brief account of crystallization of bicomponent magma.

OR

Describe the following:

- i) Phase equilibria and their application in petrology.
- ii) Crystallization of unicomponent magma

5. Write on the following in not more than two sentences: **any ten.**

- a) Dyke
- b) Pillow structure
- c) Cone sheets
- d) Name any two felsic minerals
- e) Name any two mafic minerals
- f) Name any two volcanic rocks.
- g) Differentiation
- h) Assimilation
- i) Hybrid rocks
- j) Component
- k) Concept of system
- l) Phase rule
