

Bachelor of Science (B.Sc.) (CBCS Pattern) Third Semester
USGEOT05 - Geology : Paper-I (Igneous Petrology)

P. Pages : 1

Time : Three Hours



GUG/W/18/11608

Max. Marks : 50

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

1. Describe with neat sketches Discordant forms of Igneous rocks.

OR

Give an account of the following :-

- i) Pillow structure and flow structure.
- ii) Sheet and platy structures.

2. Give an account of mineralogical characteristics of basic and ultrabasic igneous rocks.

OR

Write notes on the following :-

- a) Rhyolite and Granite.
- b) Ophitic and Sub-ophitic texture.

3. Give an account of Assimilation and hybrid rocks.

OR

Give an account of the following :-

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

4. Describe crystallization of Bi-component magma.

OR

Give a brief account of the following :-

- a) Crystallization of Uni-component magma.
- b) Phase equilibria and their application in petrology.

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

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|---------------------------------------|--|
| a) Vesicular structure. | b) Blocky lava. |
| c) Ropy lava. | d) Porphyritic texture. |
| e) Name any two over saturated rocks. | f) Name any two holocrystalline rocks. |
| g) Gaseous transfer. | h) Filter pressing. |
| i) Definition of Magma. | j) Concept of system. |
| k) Phase. | l) Phase rule. |
