

B.Sc. (CBCS Pattern) Semester-III  
**USGEOT05 - Geology-I - Igneous Petrology**

P. Pages : 2

Time : Three Hours



**GUG/W/24/11608**

Max. Marks : 50

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

- 1.** Describe the discordant forms of Igneous bodies.

**OR**

Describe the following:

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

- 2.** Give an account of Porphyritic and Poikilitic texture.

**OR**

Describe the following:

- i) Mineralogical characters of basic igneous rocks.
- ii) Mineralogical characters of acidic igneous rocks.

- 3.** Give an account on magma with special reference to its composition and origin.

**OR**

Write brief notes on the following:

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

- 4.** Give an account on crystallization of Binary magmas.

**OR**

Give an account of the following:

- i) Concept of system, phase and component.
- ii) Applications of phase equilibria in petrology.

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

- a) Petrology
- b) Columnar structure
- c) Platy structure
- d) Volcanic rocks
- e) Plutonic rocks
- f) Intrusive rocks
- g) Assimilation
- h) Gravity settling
- i) Liquid immiscibility
- j) Chemical potential
- k) Labile region
- l) Unicomponent magma.

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