

B.Sc. (With Credits)-Regular-Semester 2012 Sem III  
**B.Sc.23101 - Geology : Paper- I (Igneous Petrology)**

P. Pages : 2

Time : Three Hours



**GUG/W/16/3340**

Max. Marks : 50

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

1. Give a brief account of forms of igneous rocks.

**OR**

Give a brief account of classification of Igneous rocks.

2. Discuss the Bowen's Reaction series in detail.

**OR**

Give an account of crystallisation of unicomponent magma.

3. Write short notes on the following.

- a) Columnar structure.
- b) Poikilitic texture.
- c) Pyrogenetic Minerals.
- d) Application of phase rule.

**OR**

Write short notes on the following.

- e) Rock cycle.
- f) Directive texture.
- g) Hybrid rocks.
- h) Eutectic crystallisation.

4. Describe the following.

- a) Pillow structure.
- b) Equigranular texture.
- c) Composition of magma

d) Crystallisation of plagioclare.

**OR**

Describe the following :

e) Vesicular and amygalaloidal structure.

f) Porphyritic texture

g) Differentiation by crystallization.

h) Formation of glass.

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

a) Aa lava

b) Pohoehoe lava

c) Define petrology

d) Name any two basic igneous rocks.

e) Name any two acidic rocks.

f) Perlitic structure.

g) Monomineralic rock.

h) Assimilation

i) Liquid immiscibility

j) Component

k) Liquidus curve

l) Phase equilibria.

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