

Bachelor of Science (B.Sc.) Semester-III (C.B.S.) Examination
GEOLOGY (Igneous Petrology)
Paper—I

Time : Three Hours]

[Maximum Marks : 50]

N.B. :— (1) All questions are compulsory and carry equal marks.
(2) Draw neat sketches wherever necessary.

1. Describe the following :
(A) Classification of rocks
(B) Petrogenic cycle

OR

Describe the following :
(C) Laccolith and Lopolith
(D) Batholith
2. Describe the following :
(A) Porphyritic texture and Poikilitic texture.
(B) Intergrowth textures.

OR

Describe the following :
(C) Reaction structure
(D) Equigranular textures.
3. (A) Explain the process of crystallisation of a unicomponent magma.

OR

(B) Give a brief account of mode of occurrence and mineralogy of the following :
(i) Granites and granodiorites
(ii) Syenites
(iii) Gabbros
(iv) Dunites.

4. Describe in detail Bowen's reaction series.

OR

Explain the crystallisation of a bi-component magma exhibiting eutectic relationship.

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

- (A) Petrology
- (B) Pahoehoe Lava
- (C) Phacolith
- (D) Holohyaline rock
- (E) Over-saturated rocks
- (F) Monomineralic rocks
- (G) Magma
- (H) Give equation of phase rule
- (I) Name any two volcanic rocks
- (J) Liquid immiscibility
- (K) Assimilation
- (L) Filter pressing