

Bachelor of Science (B.Sc.) Semester—I (C.B.S.) Examination

GEOLOGY

(Mineralogy)

Compulsory Paper—2

Time : Three Hours]

[Maximum Marks : 50

Note :—(1) **ALL** questions are compulsory and carry equal marks.

(2) Draw neat sketches wherever necessary.

1. (A) Give an account of the following :

- (i) Isomorphism
- (ii) Pseudomorphism
- (iii) Polymorphism.

OR

(B) Give an account of the following :

- (i) Hardness of minerals
- (ii) Colour of minerals.

2. (A) Describe in brief various Silicate structures.

OR

(B) Give an account of Garnet family with reference to chemical composition, physical properties and geological occurrence.

3. (A) Give a brief account of Quartz family with reference to chemical composition, physical properties and geological occurrence.

OR

(B) Give a brief account of Felspathoid family with reference to physical properties, chemical composition and geological occurrence.

4. (A) Describe in brief Pyroxene family with reference to chemical composition, physical properties and geological occurrence.

OR

(B) Give a brief account of Mica family with reference to chemical composition and geological occurrence.

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

- (A) Fracture of a mineral.
- (B) Ionic bond.
- (C) Streak of a mineral.
- (D) Radioactivity.
- (E) Piezoelectricity.
- (F) Name any two aluminous silicates.
- (G) Give chemical composition of Orthoclase.
- (H) Name any two plagioclase feldspars.
- (I) Name any two Zeolites.
- (J) Mention form of Tremolite.
- (K) Cleavage in Hornblende.
- (L) Name any two alkali amphiboles.