

NKT/KS/17/5052

**Bachelor of Science (B.Sc.) Semester-I (C.B.S.) Examination**  
**GEOLOGY (Mineralogy)**  
**Compulsory Paper—2**

Time : Three Hours]

[Maximum Marks : 50

**N.B. :—** (1) **All** questions are compulsory and carry equal marks.

(2) Draw neat sketches wherever necessary.

1. (A) Describe the following :

- (i) Mineral composition of earth's crust
- (ii) Polymorphism.

**OR**

(B) Describe the following :

- (i) Forms of minerals
- (ii) Cleavage in minerals.

2. (A) Give a brief account of Aluminous silicates with reference to chemical properties, physical properties and geological occurrence.

**OR**

(B) Describe various silicate structures with suitable examples.

3. (A) Give an account of zeolites with reference to chemical properties, physical properties and geological occurrence.

**OR**

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

4. (A) Describe Amphibole family with reference to chemical properties, physical properties and geological occurrence.

**OR**

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

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

- (A) Isomorphism
- (B) Covalent bond
- (C) Define a mineral
- (D) Pyroelectricity
- (E) Alteration in olivine
- (F) Colour of olivine
- (G) Hardness of quartz
- (H) Chemical composition of wood opal.
- (I) Form of chalcedony
- (J) Name any two alkali pyroxenes
- (K) Cleavage in Hypersthene
- (L) Name any two monoclinic pyroxenes.

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