

B.Sc. (CBCS Pattern) Semester-II
USGEOT04 - Geology Paper-II - Crystallography and Optical Minerology

P. Pages : 2

Time : Three Hours



GUG/S/25/11583

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 crystallographic and geometric symmetry.

OR

Write notes on the following.

- a) Contact goniometer and measurement of interfacial angle.
 - b) Miller indices and Weiss parameters.
2. Describe in brief axial, symmetry elements along with forms of galena class of cubic system.

OR

Write notes on the following.

- a) Axial and symmetry elements of zircon class.
 - b) Forms of tetragonal system.
3. Describe in brief axial, symmetry elements and forms of axinite class of symmetry.

OR

Describe the following.

- a) Axial and symmetry elements of gypsum class.
 - b) Forms of monoclinic system.
4. Describe with neat sketches optical properties of calcite, tourmaline, biotite and muscovite.

OR

Write notes on the following.

- a) Isotropism and anisotropism.
- b) Extinction and extinction angle.

5. Write on the following is not more than two sentence solve **any ten**.

- a) Holohedral forms.
- b) Hemihedral forms.
- c) Open forms.
- d) Axial elements of baryte class.
- e) Macro pinacoid.
- f) Brachy pinacoid.
- g) Hexagonal prism.
- h) Symmetry elements of beryl type.
- i) Dihexagonal Dipyramid.
- j) Twinning.
- k) Birefringence.
- l) Twinkling
