

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

P. Pages : 2

Time : Three Hours



**GUG/W/24/11583**

Max. Marks : 50

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

1. Describe in brief various characters of Crystal.

**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 elements, symmetry elements and forms of Galena class of Isometric system.

**OR**

Write notes on the following:

- a) Axial and symmetry elements of zircon class.
- b) Forms of zircon class

3. Describe axial and symmetry elements and forms of Beryl class of Hexagonal system.

**OR**

Write notes on the following:

- a) Axial and symmetry elements of axinite class
- b) Forms of axinite class

4. Describe with neat sketches optical characters of biotite, hornblende, garnet and quartz.

**OR**

Write notes on the following:

- a) Extinction
- b) Interference colours

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

- a) Space lattice
- b) Unit cell
- c) Crystallography
- d) Axial elements of Baryte class
- e) Symmetry elements of Baryte class
- f) Macrodome & Brachidome
- g) Name any two forms of Gypsum class.
- h) Axial elements of Gypsum class.
- i) Symmetry elements of Gypsum class
- j) Twinkling
- k) Twinning
- l) Plane polarized light

\*\*\*\*\*