Bachelor of Science (B.Sc.) (CBCS Pattern) Second Semester CBCS

USGEOT04 - Geology Paper-II (Crystallography and Optical Minerology)

P. Pages : 1 **GUG/W/18/11583**

Time : Three Hours * 3 6 5 8 * Max. Marks : 50

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

1. State the Law of "Constancy of Interfacial angle" explain, How do you measure interfacial angle of a crystal with a help of contact Goniometer.

OR

Describe the following:-
a) Crystal Notations b) NaCl Crystal Structure

2. Give axial and symmetry elements of Baryte class of orthorhombic crystal system and describe its forms with millerian indices.

OR

Write on the following:-
a) Axial and symmetry elements of Galena class of cubic crystal system
b) Ditetragonal Prism and Tetragonal Prisoms.

3. Give a brief account of Gypsum class of Monoclinic crystal system with reference to axial, symmetry elements and forms with Miller's Indices.

OR

Describe the following:-
a) Axial and Symmetry Elements of Beryl.
b) Hexagonal prisms and Dihexagonal Prism.

4. What is an extinction? Describe various types of extinction with diagrams.

OR

Give an optical properties of the following minerals with diagrams:-
a) Kyanite b) Microcline
c) Labradorite d) Olivine

5. Write on the following in not more than two sentences attempt **any ten:-**
a) Define Crystal b) Edge
c) Solid Angle d) Cube
e) Octahedron f) Dodecahedron
g) Quarter Pyramid h) Symmetry elements of Axinite
i) Side Pinacoid j) Twinkling
k) Anisotropism l) Name any two minerals which show high relief

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