

Bachelor of Science (B.Sc.) Second Semester Old
2SGeo-T2 - Geology Paper-II (Crystallography and Optical Mineralogy)

P. Pages : 1

Time : Three Hours



GUG/W/18/1241

Max. Marks : 50

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

1. What is interfacial angle? Describe neat labeled diagram of contact goniometer.

OR

Give axial and symmetry elements of zircon class and describe its forms with Millerian indices.

2. Give axial and symmetry elements of Beryl class of Hexagonal system and describe its forms with Millerian Indices.

OR

Describe optical characters of Garnet, Calcite, Biotite and Orthoclase.

3. Write brief notes on the following :-

- | | |
|--|-----------------------|
| a) Constancy of interfacial angle. | b) Trisoctahedron. |
| c) Symmetry elements of axinite class. | d) Double refraction. |

OR

Describe the following :-

- | | |
|---------------------------|---------------------------------------|
| e) Crystallographic axes. | f) Symmetry elements of baryte class. |
| g) Quarter Bipyramid. | h) Becke line method. |

4. Write brief notes on the following :-

- | | |
|---------------------------------------|---------------------|
| a) Rationality of indices. | b) Tetrahexahedron. |
| c) Symmetry elements of gypsum class. | d) Anisotropism. |

OR

Describe the following:-

- | | |
|--------------------|--------------------------|
| e) Miller indices. | f) Macrodome. |
| g) Clinodome. | h) Interference colours. |

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

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|---------------------------|------------------------|
| a) Closed form. | b) Crystallography. |
| c) Centre of symmetry. | d) Hexoctahedron. |
| e) Brachy pinacoid. | f) Basal pinacoid. |
| g) Hemi pyramid. | h) Hemi orthodome. |
| i) Hemi macrodome. | j) Oblique extinction. |
| k) Plane polarized light. | l) Twinning. |
