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SECOND YEAR B.Sc. DEGREE EXAMINATION, MARCH/APRIL 2005**Part III-Group VI-Geology****Paper II-CRYSTALLOGRAPHY AND MINERALOGY****(New Scheme from 2000 Admissions)**

Time : Three Hours

Maximum : 50 Marks

I. Name the following :-

1. The normal class of Tetrazonal system is denoted by the International symbol.
2. The sign used to represent hexazonal system is
3. The twins simply adherent by the composition face are called
4. The Hardness of streak plate is about
5. Plane polarized light can be produced by
6. Contact Goniometer is used to measure
7. The Gypsum plate is particularly useful in the determination of
8. Pyrope is a variety of
9. Name the Diagnostic optical properties of Calcite.
10. The third mineral in the Mohr scale of hardness is

(10 × ½ = 5 marks)

II. Describe the following in about a paragraph :

1. External symmetry.
2. Rotoinversion axis.
3. Isometric Normal class.
4. Inter facial angle.
5. Optic axial plane.
6. Structure of Olivine group of Minerals.
7. Tourmaline.
8. Quartz Wedge.
9. Solid Solution.
10. Specific gravity.

(10 × 2 = 20 marks)

III. Distinguish between :

1. Calcite and Dolomite.
2. Isomorphism and Polymorphism.
3. Holosymmetric and Hemimorphic class.

Turn over

4. Isotropic and anisotropic minerals.
5. Colour and lustre.

(5 × 1 = 5 marks)

IV. Give an account of the Trigonal Symmetry classes.

Or

Write an essay on structure and classification of garnet group of minerals.

(1 × 10 = 10 marks)

V. Describe the general physical and optical properties of Feldspars.

Or

Write an essay on twinning in Crystals.

(1 × 10 = 10 marks)