

22I303

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Name:

Reg.No:

THIRD SEMESTER M.Sc. DEGREE EXAMINATION, NOVEMBER 2023

(CBCSS)

(Regular/Supplementary/Improvement)

CC20 GLO3 IB03 - CRYSTALLOGRAPHY AND MINERALOGY

(Geology)

(2020 Admission onwards)

Time : 2.00 Hours

Maximum : 60 Marks

Credit : 3

Part A (Short answer questions)

Answer *all* questions. Each question carries 2 marks.

1. Form.
2. Axis of symmetry.
3. Symmetry elements of Pyritohedral class.
4. Symmetry elements of galena.
5. Tetragonal scalenohedron.
6. Symmetric elements of Hemimorphic class.
7. Orthodomes.
8. Symmetry elements of Normal class of Triclinic system.
9. Pericline law.
10. Mineraloid.
11. Omission solid solution.
12. Diamagnetism.

(Ceiling: 20 Marks)

Part B (Short essay questions - Paragraph)

Answer *all* questions. Each question carries 5 marks.

13. Laws of crystallography
14. Symmetry elements of Normal class of Cubic System
15. Forms of Normal class of Hexagonal system
16. Forms of Rhombohedral class

17. Symmetry elements of Normal class of Orthorhombic system
18. Geometry of the molecules based on the coordination number
19. Isomorphism

(Ceiling: 30 Marks)

Part C (Essay questions)

Answer any *one* question. The question carries 10 marks.

20. Describe the symmetry elements and forms present in the normal class of the hexagonal system.
21. Explain the structure and classification of Silicates.

(1 × 10 = 10 Marks)
