23U313	(Pages: 2)	Name:
		Reg.No:

THIRD SEMESTER B.Sc./M.Sc. INTEGRATED GEOLOGY DEGREE EXAMINATION, NOVEMBER 2024

(CBCSS - UG)

(Regular/Supplementary/Improvement)

CC19U GEO3 B05 / CC20 GLO3 IB03 / CC23 GLO3 IB03 - CRYSTALLOGRAPHY AND MINERALOGY

(Geology - Core Course) (2019 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. Normal class.
- 3. Axes of symmetry in cubic systems.
- 4. Ditetragonal prisms.
- 5. Spheniodal class of tetragonal system.
- 6. Hexagonal pyramid of second order.
- 7. Pedions.
- 8. Symmetry elements of Trapezohedral class.
- 9. Unit Cell.
- 10. Isomorphism.
- 11. Pseudomorphism.
- 12. Radioactivity of a mineral.

(Ceiling: 20 Marks)

Part B (Short essay questions - Paragraph)

Answer all questions. Each question carries 5 marks.

- 13. Laws of crystallography.
- 14. Pyritohedral Class.
- 15. Forms of Normal class of Orthorhombic system.
- 16. Normal class of Monoclinic system.

- 17. Normal class of Triclinic system.
- 18. Twin operations.
- 19. Scope and aim of mineralogy.

(Ceiling: 30 Marks)

Part C (Essay questions)

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

- 20. Describe symmetry elements with examples and neat diagrams. Also briefly describe about the crystal systems.
- 21. Explain the structure and classification of Silicates.

 $(1 \times 10 = 10 \text{ Marks})$
