

25P245

(Pages: 2)

Name:

Reg.No:

SECOND SEMESTER M.Sc. DEGREE EXAMINATION, APRIL 2026

(CBCSS - PG)

(Regular/Supplementary/Improvement)

CC19PGEL2C05 - CRYSTALLOGRAPHY AND MINERALOGY

(Applied Geology)

(2019 Admission onwards)

Time : 3 Hours

Maximum : 30 Weightage

Part-A

Answer any *four* questions. Each question carries 2 weightage.

1. X-ray diffractometer.
2. Symmetry elements of Triclinic system.
3. Becke line test.
4. Physical properties of mica group of minerals.
5. Optical properties of Feldspar group of minerals.
6. Feldspathoids.
7. Structure of Garnet.

(4 × 2 = 8 Weightage)

Part-B

Answer any *four* questions. Each question carries 3 weightage.

8. Symmetry operations.
9. Determination of zone symbol.
10. Interference colour and determination of order.
11. Optical indicatrix.
12. Chemical bond and its types.
13. Scapolite, Sphene, Zircon.
14. Mineral transformations in the mantle with depth.

(4 × 3 = 12 Weightage)

Part-C

Answer any **two** questions. Each question carries 5 weightage.

15. Explain projections in Crystallography.
16. Write an essay on Schoenflies and Herman Mauguin crystal notations.
17. Give the procedures for conoscopic studies of minerals under thin sections and describe the various types of interference figures.
18. Explain Structure, chemistry, physical and optical characters and paragenesis of Olivine group of minerals.

(2 × 5 = 10 Weightage)
