22I403 (Pages: 2) Name: .....

Reg.No: .....

FOURTH SEMESTER M.Sc. INTEGRATED GEOLOGY DEGREE EXAMINATION, APRIL 2024

(CBCSS - UG)

(Regular/Supplementary/Improvement)

CC20I GLO4I B04 - OPTICAL AND DESCRIPTIVE 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. Polarized light.
2. Plane polarization by reflection.
3. Optical accessories.
4. Negative sign of elongation.
5. Extinction angle.
6. Melanite.
7. Bronzite.
8. General formula of Amphiboles.
9. Biotite.
10. Andalusite.
11. Chlorite.
12. Mode of occurrence of Beryl.

(Ceiling: 20 Marks)

Part B (Short essay questions - Paragraph)

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

13. Optical properties under cross polarized light.
14. Optic sign of uniaxial and biaxial minerals.
15. Chemistry of olivines.
16. Varieties and polymorphs of quartz.

17. Structure and chemistry of Feldspathoids.

18. Optical and Physical properties of Serpentine.

19. Optical and Physical properties of Rutile.

(Ceiling: 30 Marks)

Part C (Essay questions)

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

20. Write an essay on biaxial minerals. Describe briefly about biaxial indicatirx and determination of optic sign.

21. Describe the mineralogy, structure, chemistry, optical and physical properties, modes of occurrence and uses of Feldspars.

(1 × 10 = 10 Marks)

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