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(Pages: 2)

## SECOND SEMESTER M.Sc. DEGREE EXAMINATION, JULY 2016

(CUCSS - PG)

(Applied Geology)

## CC 15P GEL2 C05 - CRYSTALLOGRAPHY & MINERALOGY

(2015 Admission)

Time: Three Hours

Maximum: 36 Weightage

- I Short Answer Type Questions. Answer all questions
  - 1. Identi-points
  - 2. Plane lattice
  - 3. Rotoinversion
  - 4. Polarised light
  - 5. Pleochroism
  - 6. Quartz wedge
  - 7. Order of interference
  - 8. Symmetrical extinction
- 9. Unit Cell
- 10. Body centered lattice
- 11. Interference figure
- 12. XRD
- 13. Relief
- 14. Nesosilicates

 $(14 \times 1 = 14 \text{ weightage})$ 

- II Short Essay Type questions. Answer any seven questions
  - 15. Polymorphism
  - 16. Biaxial minerals
  - 17. Symmetry operations
  - 18. Translation periodicity of crystals
  - 19. Uniaxial interference figure
- 20. Spherical projection
- 21. Orthoclase feldspar
- 22. Determination of vibration direction
- 23. Napier's rule
- 24. Types of dispersion

 $(7 \times 2 = 14 \text{ weightage})$ 

- III Long essay type questions. Answer any two questions
  - 25. Explain the characters of Inosilicates. Give an account of Pyroxene group of minerals

Or

- 26. Explain the characters of Tectosilicates. Give an account of Feldspar group of minerals.
- 27. Define Bragg's law. Explain how powder diffraction method is useful in the study of minerals.

Or

28. What is Stereographic projection? Describe principle of stereographic projection by drawing the stereogram of normal class of Isometric system.

 $(2 \times 4 = 8 \text{ weightage})$ 

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