

16P246

(Pages: 2)

Name.....

Reg. No.....

SECOND SEMESTER M.Sc. DEGREE EXAMINATION, MAY-2017

(Regular/Supplementary/Improvement)

(CUCSS - PG)

CC 15P GEL2 C05 - CRYSTALLOGRAPHY & MINERALOGY

(Applied Geology)

(2015 Admission Onwards)

Time: Three Hours

Maximum: 36 Weightage

I. Short Answer Type Questions. Answer *all* questions

1. Plane Polarised light
2. Three dimensional lattice
3. Identi-points
4. Extinction
5. Rotoinversion
6. Gypsum plate
7. Order of interference
8. Straight extinction
9. Primitive Cell
10. Refractometer
11. Acute bisetrix
12. XRD
13. Pleochroic haloes
14. Phyllosilicates

(14 x 1 = 14 weightage)

II. Short Essay Type questions. Answer any *seven* questions

15. Plane of projection
16. Types of dispersion
17. Polymorphism
18. Garnet family.
19. Sign of elongation
20. Uniaxial interference figure
21. Orthoclase feldspar
22. Translation periodicity of crystals
23. Law of anharmonic ratio
24. Solid solution

(7 x 2 = 14 weightage)

III. Long essay type questions. Answer any *two* questions.

25. Describe the basic principles of X - ray diffraction method. How are minerals identified from X-ray diffraction patterns?

Or

26. Describe the determination of optic sign in uniaxial and biaxial minerals.

27. What are space lattices? Describe 14 different types of space lattices.

Or

28. Describe the derivation of 32 crystal classes.

(2 x 4 = 8 weightage)
