

16P351

(Pages:2)

Name.....

Reg. No.....

THIRD SEMESTER M.Sc. DEGREE EXAMINATION, OCTOBER 2017

(Regular/Supplementary/Improvement)

(CUCSS - PG)

CC15P GEL3 C10 - IGNEOUS AND METAMORPHIC PETROLOGY

(Applied Geology)

(2015 Admission Onwards)

Time: Three Hours

Maximum: 36 Weightage

I. Answer *all* questions in **two or **three** sentence each:**

1. Panidiomorphic texture.
2. Rare earth elements.
3. Lever rule.
4. Monomineralic rock.
5. Eutectic melting.
6. CIPW Norm.
7. Significance of zoning.
8. Degree of freedom in phase rule.
9. Index mineral.
10. Schist.
11. Retrograde metamorphism.
12. Paired metamorphic belts.
13. Eclogite facies.
14. Polymetamorphism.

(14 x 1 = 14 weightage)

II. Answer *any seven* question, each not exceeding **two pages:**

15. Significance of major elements in igneous petrogenetic studies.
16. Inequigranular textures.
17. IUGS classification.

18. Significance of structures in igneous rocks.
19. Pegmatites.
20. AFM diagram.
21. Concept of metamorphic grade.
22. Migmatites.
23. Slates and phyllites.
24. Granitisation.

(7 x 2 = 14 weightage)

III. Write *any two* of essays from the following:

25. Describe the magmatic differentiation.

Or

26. Describe the albite-anorthite-orthoclase system. Add a note on the significance of perthite and antiperthite.
27. Explain the genetic significance of textures and structures in metamorphic rocks.

Or

28. Describe the origin of granulites. Add a note on the significance of granulites.

(2 x 4 = 8 weightage)
