

**19P353**

(Pages: 1)

Name.....

Reg. No.....

**THIRD SEMESTER M.Sc. DEGREE EXAMINATION, NOVEMBER 2020**

(CUCSS-PG)

**CC19P GEL3 C09 - IGNEOUS AND METAMORPHIC PETROLOGY**

(Applied Geology)

(2019 Admission Regular)

Time : Three Hours

Maximum : 30 Weightage

I. Short answer type questions. Answer any *four* questions.

1. Rare earth elements and its application in igneous petrology.
2. Genetic significance of inequigranular texture.
3. Equilibrium crystallization.
4. Carbonatite.
5. Exchange reactions in metamorphism.
6. Prograde and retrograde metamorphism.
7. Impact metamorphism.

**(4 x 2 = 8 Weightage)**

II. Short essay questions. Answer any *four* questions.

8. Significance of isotope studies in petrogenesis of igneous rocks.
9. Lamprophyre.
10. Ophiolites.
11. Role of fluids in metamorphism.
12. Geothermobarometry.
13. Metamorphic facies and facies series.
14. Paired metamorphic belts and their significance.

**(4 x 3 = 12 Weightage)**

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

15. Crystallisation and melting sequence in Diopside-albite-anorthite system.
16. Streckeisen QAPF classification of plutonic rocks.
17. Chemographic projections and their relevance in metamorphic petrology.
18. Regional metamorphism of argillaceous rocks.

**(2 x 5 = 10 Weightage)**

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