

20U522S

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Name:

Reg. No.....

FIFTH SEMESTER B.Sc. DEGREE EXAMINATION, NOVEMBER 2022

(CUCBCSS-UG)

CC15U GL5 B11 – IGNEOUS PETROLOGY

(Geology- Core Course)

(2015 Admission- Supplementary/ Improvement)

Time: Three Hours

Maximum: 80 Marks

Draw neat diagrams wherever necessary.

Part- A

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

1. ----- is called Orthogabbro.
2. The phenomenon of rock of different mineral composition arising from similar magmas at different condition of crystallization is termed as -----
3. A ----- is a means of converting the chemical composition of an igneous rock to an ideal mineral composition.
4. Percentage of mafic minerals in leucocratic igneous rocks.
5. An igneous rock in which the Al_2O_3 content is greater than the content of Na_2O+K_2O+CaO .
6. ----- is an oversaturated igneous rock.
7. The plutonic equivalent of Andesite is -----
8. Number of degrees of freedom at the eutectic point in Diopside-Anorthite system.
9. A very coarse grained igneous plutonic rock with granitic composition.
10. Composition of Monzonite.

(10 × 1 = 10 Marks)

Part- B

Answer any *ten* questions. Each question carries 2 marks.

11. Phase rule.
12. Cotectic line.
13. Porphyritic texture.
14. Reaction pair.
15. Liquidus curve.
16. Rift and grain.
17. Isotherm.

18. Devitrification.
19. Acidic igneous rocks.
20. Mural joints.
21. Hypabyssal rocks.
22. Harzburgite.

(10 × 2 = 20 Marks)

Part- C

Answer any *five* questions. Each question carries 6 marks.

23. Granodiorite.
24. Petrogenetic significance of Diopside- Anorthite system.
25. Doliomorphism.
26. Lava flows.
27. Anorthosites.
28. Microstructures.
29. Variation diagram.
30. Zoning in Plagioclase feldspar.

(5 × 6 = 30 Marks)

Part- D

Answer any *two* questions. Each question carries 10 marks.

31. Study of Texture, Mineralogy, Classification, and Modes of occurrence of Syenite.
32. Explain causes for the diversity of igneous rocks.
33. Write an essay on IUGS classification of plutonic igneous rocks.
34. Explain forms of intrusive igneous rocks with neat sketches.

(2 × 10 = 20 Marks)
