19U	522S (Pages: 2) Name:
	Reg. No: FIFTH SEMESTER B.Sc. DEGREE EXAMINATION, NOVEMBER 2021
	(CUCBCSS-UG)
	CC15U GL5 B11 – IGNEOUS PETROLOGY
	(Geology- Core Course) (2015 to 2018 Admissions - Supplementary/ Improvement)
Time:	Three Hours Maximum: 80 Marks
	Draw neat diagrams wherever necessary.
	Part- A
	Answer <i>all</i> questions. Each question carries 1 mark.
1.	Igneous rocks composed of less than 45% silica.
2.	Curve in phase diagram, below which only solid can exist.
3.	is an example of monomineralic rock.
4.	A mushroom shaped intrusive igneous body.
5.	An igneous rock in which the Al_2O_3 content is greater than the content of
	Na_2O+K_2O+CaO .
6.	A very coarse grained igneous plutonic rock with granitic composition.
7.	The volcanic equivalent of Syenite is
8.	Number of degrees of freedom at the eutectic point in Diopside-Anorthite system.
9.	The rocks which exhibit mixed characteristics of volcanic and plutonic rocks are
10	. Texture seen in Gabbro.
	$(10 \times 1 = 10 \text{ Marks})$
	Part- B
	Answer any ten question. Each question carries 2 marks.
11	. Eutectic Crystallization.
12	. Granodiorite.
13	. Pyroclastic Deposits.
14	. Pillow structure.

15. Incongruent melting.

17. Oversaturated rock.

18. Primary Magma.

16. Colour Index.

- 19. Sheet Joints.
- 20. Lever Rule.
- 21. Consanguinity.
- 22. Plutonic rocks.

 $(10 \times 2 = 20 \text{ Marks})$

Part- C

Answer any five questions. Each question carries 6 marks.

- 23. Petrographic Provinces.
- 24. Alkaline rocks.
- 25. Mode and CIPW norm.
- 26. Bowen's Reaction Series.
- 27. Diopside- Albite- Anorthite system.
- 28. Igneous Intrusive forms.
- 29. Lamprophyres.
- 30. Magmatic Differentiation.

 $(5 \times 6 = 30 \text{ Marks})$

Part- D

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

- 31. Describe the various textures in igneous rocks.
- 32. Describe the texture, mineralogy, classification and modes of occurrence of Granites.
- 33. Write an essay on IUGS classification of igneous rocks.
- 34. Give an account of the crystallization and melting in albite-anorthite system. Add a note on zoning in plagioclase.

 $(2 \times 10 = 20 \text{ Marks})$
