19U524S	(Pages: 2)	Name:
		Reg No:

FIFTH SEMESTER B.Sc. DEGREE EXAMINATION, NOVEMBER 2021 (CUCBCSS-UG)

CC15U GL5 B13 - METAMORPHIC GEOLOGY

(Geology- Core Course)

(2015 to 2018 Admissions - Supplementary/Improvement)

Time: Three Hours Maximum: 80 Marks

Draw neat diagrams wherever necessary.

PART-A

Answer *all* questions. Each question carries 1 mark.

- 1. Glaucophane is the typical mineral belonging metamorphic facies.
- 2. The type of metamorphism in which high temperature is dominant.
- 3. A metamorphic rock showing alternate dark and light-coloured bands.
- 4. The pyroxene mineral present in Eclogite.
- 5. An example for rock exhibiting granoblastic texture.
- 6. The calc silicate rock formed by metasomatism.
- 7. is the process by which migmatite is formed.
- 8. The metamorphic product of limestone.
- 9. The pressure exerted on a rock as it is occurring in deeper part within the Earth.
- 10. Metamorphism localized in a halo around a pluton during contact metamorphism.

 $(10 \times 1 = 10 \text{ Marks})$

PART-B

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

- 11. Retrograde metamorphism.
- 12. Metasomatism.
- 13. Phyllite.
- 14. Geothermometry.
- 15. Contact metamorphism.
- 16. Index minerals.
- 17. Hornfels.
- 18. Mineral paragenesis.
- 19. Foliations.
- 20. Isograd.

- 21. Schistocity.
- 22. Limits of metamorphism.

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

PART-C

Answer any five questions. Each question carries 6 marks.

- 23. Cataclastic textures.
- 24. Paired metamorphic belt.
- 25. Petrography and origin of slate.
- 26. Factors affecting metamorphism.
- 27. UHT metamorphism.
- 28. Green schist facies metamorphism.
- 29. Regional metamorphism.
- 30. Miyashiro facies series.

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

PART-D

Answer any two questions. Each question carries 10 marks.

- 31. Describe the metamorphism of argillaceous rocks.
- 32. Explain type of metamorphism based on plate tectonic setting.
- 33. Explain the metamorphic effects on basic igneous rocks.
- 34. Describe various textures of metamorphic rocks with neat figures.

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