21U526	(Pages: 2)	Name:
		Reg.No:

FIFTH SEMESTER B.Sc. DEGREE EXAMINATION, NOVEMBER 2023

(CBCSS - UG)

(Regular/Supplementary/Improvement)

CC19U GEO5 B12 - METAMORPHIC PETROLOGY

(Geology - Core Course)

(2019 Admission onwards)

Time: 2.00 Hours Maximum: 60 Marks

Credit: 3

Part A (Short answer questions)

Answer all questions. Each question carries 2 marks.

- 1. Metamorphic diffusion.
- 2. Contact aureoles.
- 3. Flaser texture.
- 4. Isograd.
- 5. Garnet zone.
- 6. Barrowian facies series.
- 7. Paired metamorphic belts.
- 8. Metasomatism.
- 9. Geobarometry.
- 10. Neosome.
- 11. Slate.
- 12. Granite gneiss.

(Ceiling: 20 Marks)

Part B (Short essay questions - Paragraph)

Answer all questions. Each question carries 5 marks.

- 13. Limits of metamorphism.
- 14. Formation and classification of foliation.
- 15. Explain the equillibrium mineral assemblages concept in metamorphism.
- 16. Classification of metamorphic facies based on pressure.
- 17. Describe the difference between prograde and retrograde metamorphism.

- 18. Give an account of mineral reactions during medium pressure metamorphism of pelitic rocks.
- 19. Metamorphism of calcareous rocks.

(Ceiling: 30 Marks)

Part C (Essay questions)

Answer any *one* question. The question carries 10 marks.

- 20. Describe the classification scheme for metamorphic rocks.
- 21. Explain the effects of metamorphism on basic igneous rocks.

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