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Name:

Reg.No:

FIFTH SEMESTER M.Sc. INTEGRATED GEOLOGY DEGREE EXAMINATION, NOVEMBER 2023

(CBCSS)

(Regular/Supplementary/Improvement)

CC20I GLO5I B06 - METAMORPHIC PETROLOGY

(Geology)

(2020 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. Low and high T/P limits.
2. Impact metamorphism.
3. Decussate texture.
4. ACF diagram.
5. Anatexis.
6. Sillimanite zone.
7. Facies formed under medium pressure conditions.
8. Prograde metamorphism.
9. Metapelites.
10. Metabasites.
11. Mylonite.
12. Serpentinization.

(Ceiling: 20 Marks)

Part B (Short essay questions - Paragraph)

Answer *all* questions. Each question carries 5 marks.

13. Role of temperature in metamorphism.
14. Explain dynamic and dynamo thermal metamorphism.
15. Regional metamorphism.
16. Fabric in metamorphic rocks.
17. Explain the changes involved with increase in metamorphism.

18. Explain the effects of metamorphism on pure and impure limestone.

19. Describe petrography and origin of slate.

(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 how different tectonic setting produces various mineral assemblages.

(1 × 10 = 10 Marks)
