16U524　　　　　　　(Pages: 2)　　　　　　Name: ………………………

Time: Three Hours　　　　　　　　　　　　　　　　　　Maximum: 80 Marks

Part - A

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

1. The typical orthopyroxene in charnockite.

2. Define contact metamorphism.

3. Among the following minerals, which one is typically metamorphic? - calcite, cordierite, biotite, plagioclase.

4. Among the following which one is a product of the highest temperature of metamorphism? Schist, Granulite, Phyllite, Slate.

5. The type of metamorphism by which tektites are formed.

6. Define porphyroblasts.

7. Pumpellyite is a product of -------------- grade metamorphism.

8. What is deviatoric stress?

9. The most common iron-rich garnet seen in metamorphic rocks.

10. What is UHT metamorphism?

(10 x 1 = 10 Marks)

Part – B

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

11. Xenoblastic texture.

12. Epizone.

13. Retrograde metamorphism.

14. Eclogite.

15. Blueschist facies.

16. Factors of metamorphism.

17. Augen gneiss.

18. Migmatite.

19. Slate.

20. Myrmekite.

21. Metasomatism.

22. Polymetamorphism.

(10 x 2 = 20 Marks)

Part – C
Answer any *five* questions. Each question carries 5 marks.

23. Metamorphism of argillaceous rocks.

24. Metamorphism in divergent plate margins.

25. Limits of metamorphism.

26. Regional metamorphism.

27. Petrography and origin of amphibolites.

28. Metamorphic differentiation.

29. Barrowian sequence.

30. Metamorphic foliations.

(5 x 6 = 30 Marks)

Part – D
Answer any *two* questions. Each question carries 10 marks.

31. Describe the important textures in metamorphic rocks and their significance.

32. Describe the effects of metamorphism on basic igneous rocks.

33. What is meant by grade of metamorphism? Describe the various grades of metamorphism.

34. Discuss various types of metamorphism based on principal agents.

(2 x 10 = 20 Marks)

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