

2019

B.Sc. (Hons.)

4th Semester Examination

GEOLOGY (Honours)

Paper—C8T

Full Marks : 40

Time : 2 Hours

*The figures in the margin indicate full marks.
Candidates are required to give their answers
in their own words as far as practicable.*

Group—A

Answer any *five* questions
of the following :

2×5=10

1. What is metamorphism ?
2. Define the term index mineral.
3. What is contact metamorphism ?
4. What is the difference between porphyroblast and porphyroclast ?
5. What is dehydration reaction ? Give example.

6. Write the characteristic mineral assemblage of blueschist and eclogite.
7. What types of texture you can expect in mylonitic rock ?
8. What is P-T-t path ?

Group-B

Answer any *four* questions.

of the following :

5×4=20

9. Write the relation between metamorphic grade, zone and facies.
10. Write a short note on ACF diagram with its significance.
11. Write a short note on shear-indicator texture and structure found in the mylonitic rock.
12. Write a short note on paired metamorphic belt.
13. Briefly describe about Geothermometry and Geobarometry.
14. Briefly discuss about Low P-T metamorphism of mafic rock.

(3)

Group-C

Answer any *one* question

of the following :

10×1=10

15. (i) Write a short note on different types of devolatilization reactions.
- (ii) Describe with neat sketch the relation between metamorphism with plate tectonics. 5+5
16. (i) Write a note on regional metamorphosis of pelitic rock under medium P-T condition. 6
- (ii) Write the difference between solid-solid net transfer reaction and ion-exchange reaction.

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