

## বিদ্যাসাগর বিশ্ববিদ্যালয় VIDYASAGAR UNIVERSITY

## **Question Paper**

## **B.Sc.** Honours Examinations 2022

(Under CBCS Pattern)
Semester - IV

**Subject: GEOLOGY** 

Paper: C8-T

**Metamorphic Petrology** 

Full Marks: 40 Time: 2 Hours

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

## Answer any four of the following questions:

 $5 \times 4 = 20$ 

- 1. Write a short note on contact metamorphism.
- 2. Discuss about role of fluid in metamorphism.
- 3. Write the relation between grade, zone and facies in metamorphic petrology.
- 4. Write a note on paired metamorphic belt.
- 5. Describe pre, syn and post kinematic structures with proper diagram.
- 6. Write a short note on devolatilization reaction.

P.T.O.

|       | ( 2 )  |           |
|-------|--|-----------|
| 2. Aı | nswer any <i>two</i> of the following questions:   | 10×2=20   |
| 1.    | Describe elaborately the metamorphism of mafic rock in intermediate temperature condition. | pressure- |
| 2.    | (a) Write a note on eclogite facies.   | 5         |
|       | (b) Write a note on solid net transfer reaction.   | 5         |
| 3.    | (a) Write a brief note on ACF diagram.   | 6         |
|       | (b) Describe about ocean floor metamorphism.   | 4         |
| 4.    | (a) Write a note on P-T-t path.  | 5         |
|       | (b) Discuss about the relationship between metamorphism and tectonics                      | s. 5      |
|       |  |           |