

## UNIVERSITY OF NORTH BENGAL

B.Sc. Honours 1st Semester Examination, 2023

### CC1-GEOLOGY

## INTRODUCTION TO EARTH SYSTEM SCIENCE

Time Allotted: 2 Hours Full Marks: 40

The figures in the margin indicate full marks.

#### **GROUP-A**

## Answer any five from the following

 $1 \times 5 = 5$ 

- 1. What is crust?
- 2. What is the basic rock composition of mantle?
- 3. What is mid oceanic ridge?
- 4. What is the difference between felsic and mafic rock?
- 5. What is supernova?
- 6. What is a lithophile and atmophile element?
- 7. What is Mohorovicic discontinuity?
- 8. What is Geosyncline?

#### **GROUP-B**

# Answer any three from the following

 $5 \times 3 = 15$ 

- 9. What do you mean by cosmic nucleo-synthesis of elements?
- 10. How are igneous, sedimentary and metamorphic rocks different from each other?
- 11. Define Bode's law and Oddo Harkins Rule.
- 12. What are the types of stratigraphic units used in separate stratigraphic units and markers?
- 13. Define Continental Shelf, Continental Slope and Continental Rise.

#### **GROUP-C**

## Answer any two from the following

 $10 \times 2 = 20$ 

- 14. What is a subduction zone? Can you explain with neat sketch? What is a meteorite?
- 15. What are the isotopes they can be used for radiometric dating? How can it be done?
- 16. What is the meaning of Eh and pH? How is G connected to H and S and T? Explain.
- 17. What is Continental Drift Theory? Explain.

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