Time Allotted: 2 Hours



UNIVERSITY OF NORTH BENGAL

B.Sc. Honours 6th Semester Examination, 2023

DSE-P3-GEOLOGY

OCEANOGRAPHY

Full Marks: 40

The figures in the margin indicate full marks. Answer any *five* questions from the following: $1 \times 5 = 5$ 1. (a) Bars (b) Methane Hydrate (c) Law of the Sea (d) Active Continental margin (e) Gulf Stream (f) Bathymetry (g) Antarctic Bottom Water (h) Seiche. $5 \times 3 = 15$ 2. Answer any *three* questions from the following: (a) Explain the factors that influence Wind Wave development. 5 (b) Briefly explain the formation of Tides. 5 (c) What are Turbidity currents and how do they form Turbidities? 5 (d) Explain Ekman transport and the phenomenon of upwelling. 5 (e) What is Residence time? How does the ocean maintain its chemical equilibrium? 5 $10 \times 2 = 20$ 3. Answer any *two* questions from the following: (a) Explain briefly Thermohaline circulation of Earth and its importance. 10 (b) Describe the different types of marine sediments with examples. 10 (c) Explain concept of ENSO and its effects on global climate and economy. 10 (d) Describe briefly about the Origin of water on Earth. How did the first oceans form on 5+3+2 Earth? What evidences do we have that can tell us about the probable age of oceans?

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