



'সমানো মন্ত্র: সমিতি: সমানী'

UNIVERSITY OF NORTH BENGAL

B.Sc. Honours 6th Semester Examination, 2022

DSE-P3-GEOLOGY

OCEANOGRAPHY

Time Allotted: 2 Hours

Full Marks: 40

The figures in the margin indicate full marks.

1. Write short notes on any **five** of the following: 1×5 = 5
 - (a) Mid oceanic ridge
 - (b) Hot spot
 - (c) Bathymetry
 - (d) Hydrothermal vent
 - (e) CCD
 - (f) Radiolaria
 - (g) Gulf Stream
 - (h) Antarctic bottom water.

2. Answer any **three** questions from the following: 5×3 = 15
 - (a) Explain thermohaline circulation of the ocean. 5
 - (b) Illustrate the basic ecological division of the ocean. 5
 - (c) Briefly describe the different types of marine sediments. 5
 - (d) Explain Ekman transport and the phenomenon of upwelling. 5
 - (e) Comment on how the ocean maintains its pH and the effect of human activities on the pH of the ocean. 5

3. Answer any **two** questions from the following: 10×2 = 20
 - (a) Describe briefly about the origin of water on Earth. How did the first oceans form on Earth? What evidences do we have that can tell us about the probable age of oceans? 5+3+2
 - (b) Explain concept of ENSO and its effects on global climate and economy. 10
 - (c) What is Residence time? How does the ocean maintain its chemical equilibrium? 10
 - (d) Write a synoptic overview of Oceanic heat budget. 10

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