



**UNIVERSITY OF NORTH BENGAL**  
B.Sc. Honours 6th Semester Examination, 2021

**DSE3-GEOLOGY**

**OCEANOGRAPHY**

Full Marks: 40

**ASSIGNMENT**

*The figures in the margin indicate full marks.*

**Answer any four questions from the following**

10×4 = 40

1. Explain the following: 6+4
  - (a) ENSO
  - (b) Ekman transport
  
2. 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
  
3. What is Residence time? How does the ocean maintain its chemical equilibrium? Comment on how the ocean maintains its pH and the effect of human activities on the pH of the ocean. 1+3+6
  
4. Explain thermohaline circulation of the ocean. What are the different types of surface currents and how does surface currents affect the weather and climate? 5+5
  
5. Briefly describe the different types of marine sediments. How can marine sediments give us information about Earth's past? 6+4
  
6. Discuss in brief cell circulation in connection with the wave induced current and resulting beach morphology. 10
  
7. Illustrate the basic ecological division of the ocean. Give an overview of Environmental factors that can Influence Marine Organisms. 10
  
8. Write a synoptic overview of Oceanic heat budget. 10

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