

2025

M.Sc. 1st Semester Examination
OCEAN GEOMATICS WITH AI

Paper : OGAC401X0

**(Fundamental Concept of Oceanography and
Ocean Optics)**

Full Marks : 50

Time : Two Hours

*The figures in the margin indicate full marks.
Candidates are required to give their answers
in their own words as far as practicable.*

Group - A

Answer any *four* questions : 2×4=8

1. What is salinity?
2. Why ocean is looking blue?
3. Mention at least two characteristics of Bengal Fan.
4. Define ocean currents.
5. What is ecological flow?
6. Which gases are dissolved in seawater?

P.T.O.

(2)

Group - B

Answer any *four* questions : $4 \times 4 = 16$

7. Explain the upwelling zone and its impact on potential fishing zones.
8. Describe the characteristics of Case-1 and Case-2 waters from the perspective of ocean colour remote sensing.
9. Describe the Intertropical Convergence Zone (ITCZ) with relation to the Indian monsoon.
10. Write a short note on regarding estuarine ecosystem.
11. Define plankton and explain its importance in the marine ecosystem.
12. Describe the operation of CTD in marine water quality analysis.

Group - C

Answer any *two* questions : $8 \times 2 = 16$

13. Briefly explain the evolution of ocean colour sensors.
14. State briefly regarding the development stages of El Niño and La Niña .
15. Briefly describe the structure and process of marine nitrogen cycle.

(3)

16. Describe the marine productivity of the Arabian Sea and the Bay of Bengal and its impact on the marine fisheries sector.

Internal Assessment : 10 marks
