R8347

Sub. Code	
461401	

M.Sc. DEGREE EXAMINATION, APRIL - 2023

Fourth Semester

Oceanography and CAS

RESEARCH METHODOLOGY

(CBCS – 2019 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A $(10 \times 2 = 20)$

Answer **all** questions.

- 1. Define diatom with example.
- 2. Define seaweed with example.
- 3. Define Microscope?
- 4. What is Histochemistry?
- 5. Short note on spectroscopy and its types
- 6. Define cDNA?
- 7. Define standard deviation and error.
- 8. What is FASTA and BLAST?
- 9. Define data with example?
- 10. What is e-journal?

Part B $(5 \times 5 = 25)$

Answer **all** questions, choosing either (a) or (b).

11. (a) Describe the methods for estimation of reproduction in animals.

Or

- (b) Write note on ecological importance diatoms.
- 12. (a) Describe about principles and applications of light microscope.

Or

- (b) Explain about histochemistry and its methods.
- 13. (a) Write principles and applications of chromatography.

Or

- (b) Give a detailed account on electrophoresis with principle and application.
- 14. (a) Give detailed account on regression and ANOVA.

Or

- (b) Classify the types of search engines and function in bioinformatics.
- 15. (a) How do you write a research abstract?

Or

(b) Describe about art of presenting data results.

Part C

 $(3 \times 10 = 30)$

Answer any three questions.

- 16. Describe in detail about assessing primary productivity.
- 17. Write an essay on Scanning and Electron Microscope.

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- 18. Explain about centrifuge and its principle and applications.
- 19. Describe in details about biological databases.
- 20. Give an account on manuscript preparation with computer aided techniques.

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