

M.Phil/Pre Ph.D Regular & Supplementary Examinations – OCTOBER, 2023
R210103

Paper –III: Marine Biology and Aquaculture.
Biotechnology

Time : 3 hrs

Maximum Marks : 100

Answer One Question from Each Unit
All Questions Carry Equal Marks

UNIT-1

1. a. Describe the commercially important marine microorganisms.
b. Write an account on bioactive compounds.

OR

2. a. Describe the enzymes and their importance
b. Explain the marine food production and their uses.

UNIT-11

3. a. Describe the culture methods of Crabs and their food value.
b. Describe the culture of Molluscs and their importance.

OR

4. a. Explain the Hormonal manipulation of sex and its significance.
b. Explain the chromosomal manipulation of sex in Fish.

UNIT-111

5. a. Describe the preparation of Agar-agar and its uses.
b. Explain the preparation of Alginates and its uses.

OR

6. a. Describe the applications of enzymes in Fish processing.
b. Explain the bioconversion of organic materials and Fish ensilage.

UNIT-IV

7. a. Write an account on Bioactive marine natural products like membrane receptors.
b. Describe the methods of isolation and identification of marine bioactive compounds such as labile proteins and their applications.

OR

8. a. Write an account on Bioactive marine natural products like anti-tumor compounds.
b. Describe the methods of isolation identification of marine bioactive compounds like Toxins and their uses.

UNIT-V

9. a. Write an account on Single Cell Proteins.
b. Describe the sources of Marine Enzymes and their uses.

OR

10. a. Describe the sources of Marine Lipids and their applications.
b. Write an account on Bioremediation.
