PG CBCS M.SC. Semester- I Examination, 2023 FISHERIES SCIENCE

PAPER: FSC 104

(POLLUTION, ECO-TOXICOLOGY AND AQUATIC MICROBIOLOGY AND OCEANOGRAPHY, REMOTE SENSING & GIS AND DISASTER MANAGEMENT) Full Marks: 40 Time: 2 Hours

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

Write the answer for each unit in separate sheet

FSC 104.1: POLLUTION, ECO-TOXICOLOGY AND AQUATIC MICROBIOLOGY

GROUP-A

Answer any TWO of the following questions:

 $2\times2=4$

MCC/23A

- 1. 'All pollutants are not xenobiotic' explain.
- 2. Write two names of agrochemical caused toxicity in aquaculture pond.
- 3. What is MRL?
- 4. What do you mean by environmental genotoxicity?

GROUP-B

Answer any TWO of the following questions:

 $2 \times 4 = 8$

- 1. Difference between prebiotic and probiotic in aquaculture.
- 2. Briefly describe Factors Modifying Toxicity.
- 3. What do you mean by acute toxicity and chronic toxicity with example?
- 4. Define microbial biofilm. Write down its significance in aquaculture.

GROUP-C

Answer any ONE of the following questions:

 $1\times8=8$

- Enlist different types of media used in microbiological study. Discuss different control method for microbial growth.
- 2. What do you mean by biotransformation? Write the steps of biotransformation of any xenobionts. Add a note on cytochrome P450.

(P.T.O.)



FSC 104.2 OCEANOGRAPHY, REMOTE SENSING & GIS AND DISASTER MANAGEMENT

GROUP-A

Answer any TWO of the following questions:

 $2\times2=4$

- 1. Define meiobenthos microbenthos.
- 2. What is GPS?
- 3. Differentiate between surface and long wave.
- 4. State about Neap Tide.

GROUP-B

Answer any TWO of the following questions:

 $2\times4=8$

- 1. Describe the chemical characteristics of ocean.
- 2. Write down applications of GIS in coastal resource management.
- 3. State about Sustainable management of ocean.
- 4. What do you mean by spilling and breaking wave?

GROUP-C

Answer any ONE of the following questions:

 $1\times8=8$

- 1. Write the application of Remote sensing technology used to management fish faunal diversity. Explain about ocean energy. 5+3
- 2. Briefly describe Pre disaster prevention and post disaster management in coastal aquafarm. 4+4
