

**MZOE-003**

# **ASSIGNMENT BOOKLET**

**M.Sc. (Zoology) Programme**

**(MSCZOO)**

## **AQUACULTURE**

**Valid from 1<sup>st</sup> January, 2024 to 31<sup>st</sup> December, 2024**



**School of Sciences  
Indira Gandhi National Open University  
Maidan Garhi  
New Delhi-110068**

**(2024)**

Dear Student,

Please read the Section on assignments in the Programme Guide for M.Sc. (Zoology). A weightage of 30 per cent, as you are aware, has been earmarked for continuous evaluation, which would consist of one tutor-marked assignment for this course. The assignment is in this booklet. The total marks for this assignment is 100, of which 40 marks are needed to pass it.

### Instructions for formatting your Assignments

Before attempting the assignment please read the following instructions carefully:

- 1) On top of the first page of your answer sheet, please write the details exactly in the following format:

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**ROLL NO.:** .....

**NAME:** .....

**ADDRESS:** .....

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**COURSE CODE:** .....

**COURSE TITLE:** .....

**ASSIGNMENT NO.:** .....

**STUDY CENTRE:** .....

**DATE:** .....

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**PLEASE FOLLOW THE ABOVE FORMAT STRICTLY TO FACILITATE EVALUATION AND TO AVOID DELAY.**

- 2) Use only foolscap size writing paper (but not of very thin variety) for writing your answers.
- 3) Leave 4 cm margin on the left, top and bottom of your answer sheet.
- 4) Your answers should be precise.
- 5) Solve this assignment, and **submit the complete assignment answer sheets within the due date.**
- 6) The assignment answer sheets are to be submitted to your Study Centre within the due date. **Answer sheets received after the due date shall not be accepted. We strongly suggest that you retain a copy of your answer sheets.**
- 7) This assignment is valid from 1<sup>st</sup> January, 2024 to 31<sup>st</sup> December, 2024. If you have failed in this assignment or fail to submit it till its validity, then you need to get the assignment for the next year and submit it as per the instructions given in the Programme Guide.
- 8) **You cannot fill the examination form for this course** until you have submitted this assignment.

We wish you good luck.

## ASSIGNMENT PARASITOLOGY

Course Code: MZOE-003  
Assignment Code: MZOE-003/TMA/2024  
Maximum Marks: 100

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**Note: Attempt all questions. The marks for each question are indicated against it.**

1. What are the factors governing aquaculture development? Discuss the constraining factors for aquaculture development. (5+5=10)
2. Discuss the role of inland freshwater resources of India in aquaculture. (10)
3. Describe the characteristic physical features of the prawn *Macrobrachium rosenbergii*. Enumerate the candidate species of crustaceans for marine aquaculture. (5+5=10)
4. Enumerate the criteria for selection of a site for cage culture. What are the challenges of pen and cage cultures? (5+5=10)
5. Discuss the various design consideration of a raceway aquaculture. Discuss the management of C:N level in biofloc farming. (6+4=10)
6. Distinguish between dry bundh and wet bundh. Discuss the media and reagent used for cryopreservation of fish sperm. (5+5=10)
7.
  - a) Write a note on nutritional requirement of carbohydrates in fish. (5)
  - b) Write a note on DNA and RNA vaccines used in aquaculture. (5)
8.
  - a) What are the factors regulating price of fish in a market? (5)
  - b) What are the regulations of activities in Coastal Regulation Zone? (5)
9. Elucidate the principles of extension education in fisheries. (10)
10. Describe the different technological challenges in aquaculture production. (10)