

BAQ-002

**ASSIGNMENT BOOKLET**

**DIPLOMA IN AQUACULTURE**

Optional Course  
in

**FRESHWATER AQUACULTURE**

Valid from 1<sup>st</sup> January, 2025 to 31<sup>st</sup> December, 2025

**PLEASE NOTE**

- Diploma in Aquaculture is offered in two optional streams, **Freshwater Aquaculture** and **Coastal Aquaculture**. It comprises compulsory core courses on basics of aquaculture (14 credits) and optional courses on two specialized streams of Aquaculture that are fresh water aquaculture (14 credits) and coastal aquaculture (14 credits).
- The basic of aquaculture course for any stream of Diploma in Aquaculture has a compulsory component of 6 credits worth project work.
- Optional freshwater aquaculture and coastal aquaculture courses have 6 credits worth of laboratory course each.
- You cannot appear in the Term-End Examination of any course without registering for the course. Otherwise, your result will not be declared and the onus will be on you.



**School of Sciences**

**Indira Gandhi National Open University  
Maidan Garhi, New Delhi-110068**

**(2025)**

Dear Student,

We hope you are familiar with the system of evaluation to be followed for the Diploma in Aquaculture Programme. At this stage you may probably like to re-read the section on assignments for Elective Courses in the Programme Guide (on page 10) that we had sent you after your enrolment. A weightage of 30 per cent, as you are aware, has been earmarked for continuous evaluation which would consist of **one tutor-marked assignment (TMA)** for this course.

### Instructions for Formatting Your Assignments

Before attempting the assignment, please read the following instructions carefully.

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

---

ENROLMENT NO.: .....

NAME : .....

ADDRESS : .....

.....

.....

COURSE CODE: .....

COURSE TITLE : .....

ASSIGNMENT NO. ....

STUDY CENTRE: ..... DATE .....

---

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

- 1) Use only foolscap size writing paper (but not of very thin variety) for writing your answers.
- 2) Leave 4 cm margin on the left, top and bottom of your answer sheet.
- 3) Your answers should be precise.
- 4) While solving problems, clearly indicate the question number along with the part being solved. Be precise.
- 5) **This assignment will remain valid for one year from January 1, 2025 to December 31, 2025.** However, you are advised to submit it within **12 weeks** of receiving this booklet to accomplish its purpose as a teaching-tool. Answer sheets received after the due date shall not be accepted.

**We strongly feel that you should retain a copy of your assignment response to avoid any unforeseen situation and append, if possible, a photocopy of this booklet with your response.**

We wish you good luck!

**ASSIGNMENT**  
**(Tutor Marked Assignment)**

**Course Code: BAQ-002**  
**Assignment Code: BAQ-002/TMA/2025**  
**Maximum Marks: 100**

---

1. Differentiate between *Macrobrachium rosenbergii* and *Macrobrachium malcolmsonii*. Describe the breeding of *M. rosenbergii*. (10)
2. Describe briefly the site selection and design of an aquafarm for freshwater fishes. (10)
3. Describe why and how predatory and weed fishes are eradicated from fish culture ponds. (10)
4. Define the pearl, and classify them. Describe the mineralization of pearl. (10)
5. Discuss the technique of hypophysation in details. (10)
6. a) Describe the process of pond construction. (7)  
b) Mention the roles of Mahua oil cake and tea seed cake in the removal of unwanted fishes. (3)
7. Write an essay on the biological aspects of Schizothoracids as important fishery resources. (10)
8. Enlist the major types of hatcheries. Give detailed description of any two of them. (10)
9. Describe some of the major parasitic diseases found in fishes. (10)
10. List the names of live bearers and egg layers ornamental fishes. Describe the culture of any one fish from each type of your choice. (10)