

BAQ-002

ASSIGNMENT BOOKLET

DIPLOMA IN AQUACULTURE

Optional Course
in

FRESHWATER AQUACULTURE

Valid from 1st January, 2024 to 31st December, 2024

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

(2024)

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, 2024 to December 31, 2024.** 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/2024
Maximum Marks: 100

1. Discuss the technique of hypophysation in details. (10)
2. a) Discuss the different components of a hatchery. (6)
b) Write a note on Breeding Hapa. (4)
3. Discuss the methods of eradication of predatory and weed fishes? (10)
4. 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)
5. Write an essay on the biological aspects of Schizothoracids as important fishery resources. (10)
6. a) Write an account of the different bacterial diseases observed in hatcheries. (5)
b) What are the different types of pearl? (5)
7. Discuss the deficiency symptoms of different vitamins in fishes. (10)
8. Describe the detailed surgical procedures undertaken in fresh water pearl culture. (10)
9. How would you distinguish between male and female *Macrobrachium rosenbergii*? Discuss the life cycle of *M. rosenbergii* with diagram. (4+6=10)
10. Write short notes: (2½ ×4=10)
 - i) Biomineralization of pearl
 - ii) Characteristics of Zebrafish
 - iii) Liming of ponds and its use
 - iv) Distinguishing morphological features of male and female carps