

BAQ-002

ASSIGNMENT BOOKLET

DIPLOMA IN AQUACULTURE

Optional Course
in

FRESHWATER AQUACULTURE

Valid from 1st January, 2023 to 31st December, 2023

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

(2023)

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, 2023 to December 31, 2023.** 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/2023
Maximum Marks: 100

1. Differentiate between the following: (2½×4=10)
 - i) Artificial and natural pearl
 - ii) Small and large catfish
 - iii) Carps and Brood fishes
 - iv) Induced and Bundh breeding in carps

2. Write short notes on the following: (2½ ×4=10)
 - i) Manuring
 - ii) Goldfish
 - iii) Culture of *Eurayle ferox*
 - iv) Design of an aquafarm

3. a) Describe in brief two major Indian carps. (5×2=10)
b) What is hypophysation? Explain, how is it useful in inducing breeding in fishes?

4. Enlist the major types of hatcheries. Give detailed description of any two of them. (10)

5. a) Describe various methods used for the control of aquatic weeds. (5×2= 10)
b) Write a note on application of duckweeds in the sewage treatment.

6. Describe some of the major parasitic diseases found in fishes. (10)

7. a) Give the applications of *Azolla* in fish farming. (5×2= 10)
b) Describe the general morphology of pearl bivalves.

8. What are common diseases of hatcheries? Describe few of them. (10)

9. Write notes on the following: (2½ ×4=10)
 - i) Importance of live feed in fish culture
 - ii) Rotifers
 - iii) Murrels and Anabantids
 - iv) Nutrient digestibility

10. List the names of live bearers and egg layers ornamental fishes. (10)
Describe the culture of any one fish from each type of your choice