

**ASSIGNMENT BOOKLET
Diploma in Aquaculture**

BAQ-002

**Optional Course
in
Freshwater Aquaculture
ASSIGNMENT**

Valid from 1st January, 2021 to 31st December, 2021

**It is compulsory to submit the Assignment before filling in the
Term-End Examination Form.**

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

(2021)

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. Write units at each step of your calculations as done in the text because marks will be deducted for such mistakes. Take care of significant digits in your work. Recheck your work before submitting it.
- 5) **This assignment will remain valid for one year from January 1, 2021 to December 31, 2021.** 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-02

Assignment Code: BAQ/TMA/2021

Max. Marks: 100

1. Describe briefly the site selection, design and construction of Aquafarm for freshwater fishes. (10)
2. Discuss briefly how sewage can be used as feed to culture fresh water fish. Also comment upon the importance of sewage fed fisheries in India. (10)
3.
 - i) Explain the basic principles of integrated fish farming and describe Seri-fish farming system. (5)
 - ii) List various types of ornamental fishes. Describe the biology, breeding and culture of any five fish of your choice. (10)
4. Differentiate between *Macrobrachium rosenbergii* and *Macrobrachium malcolmsonii*. Describe breeding and hatchery management of *M. rosenbergii*. (10)
5. Define pearl and discuss the basic steps involved in freshwater pearl culture operations. (10)
6.
 - i) Describe the feed formulation and its preparation. (2½)
 - ii) Describe how and why predatory and weed fishes should be eradicated. (10)
 - iii) List and describe any five parasitic diseases of fishes (2½)
7. List the parasite diseases of fish and describe any five. (5)
8. Write notes on the following: (5×5=25)
 - i) Live feed
 - ii) Common bacterial diseases of fresh water prawn (*Macrobrachium rosenbergii*) in hatcheries
 - iii) Culture of murrels
 - iv) Hypophysation in carps
 - v) Pig- fish integrated system