

M.Sc. 3rd Semester Examination, 2022

FISHERIES SCIENCE

(Special paper : *Aquaculture*)

(*Aquaculture Practices/Fish Nutrition and
Bioenergetics*)

PAPER – FSC-303(U1 & U2)

Full Marks : 40

Time : 2 hours

The figures in the right hand margin indicate marks

*Candidates are required to give their answers in their
own words as far as practicable*

PAPER—FSC-303(U1)

(*Aquaculture Practices*)

A. Answer any *two* from the following : 2 × 2

1. What are the impact of exotic fishes in aquaculture ?

2. Write scientific name and common name of two live bearer ornamental fishes.
3. What are the different types live feed ? Mention their importance in aquaculture.
4. What is organic aquaculture ?

B. Answer *two* from the following : 4 × 2

5. Discuss an overview of global aquaculture production.
6. Briefly explain the objectives of aquaculture in India.
7. Discuss the scope and challenges of sea weed culture in India.
8. Briefly discuss the Govt. guidelines for waste management in shrimp farm.

C. Answer any *one* from the following : 8 × 1

9. What are the present status of ornamental fish trade in India ? Briefly discuss the advan-

tages of ornamental fish culture. Add a note on aquarium plants. 2 + 3 + 3

10. Write short notes on : 4 + 4

(i) Waste water aquaculture

(ii) Colour enhancement of ornamental fishes.

PAPER—FSC-303(U2)

(*Fish Nutrition and Bioenergetics*)

D. Answer any *two* questions from the following : 2×2

11. State on the energy flow diagram in aquatic organism.

12. Mention four important anti-nutrients with their ingredient sources.

13. Why protein is very much important in fish nutrition ?

14. Importance of check tray in shrimp feeding management.

E. Answer any *two* questions from the following : 4×2

15. Discuss the different factors influencing in energy partitioning in aquatic organism.

16. State the digestion process of food in fish.

17. Discuss about nutritional issues of aquatic and terrestrial organism.

18. Write a notes on the vitamin requirements in fish.

F. Answer any *one* question from the following : 8×1

19. Classify different types of fish feed. Enlist different non-convention fish feed resources used in aqua feed preparation. $3 + 5$

20. Write down different parameters for proximate analysis of fish feed. State the relation among FCR and PER with an example. $4 + 4$
