



21100610

QP CODE: 21100610

Reg No :

Name :

B.Sc DEGREE (CBCS) EXAMINATION, MARCH 2021

Third Semester

B.Sc Zoology Model II Aquaculture

VOCATIONAL COURSE - ZA3VOT06 - FISH NUTRITION

2017 Admission Onwards

9886E3E5

Time: 3 Hours

Max. Marks : 60

Part A

*Answer any **ten** questions.*

*Each question carries **1** mark.*

1. Distinguish between Gullet and Pylorus.
2. Distinguish between Simple and Conjugated Proteins with examples.
3. What are Monosaccharides? Give examples?
4. What is Retinol?
5. How is Ash content estimated in Proximate Analysis?
6. How does Water temperature influence digestibility in fishes?
7. What is Nitrogen Balance index?
8. What is Spirulina? Explain its importance as an aquaculture feed?
9. What are Antivitamins? Give examples?
10. What are Minced Feeds?
11. Name any two steroid hormones used as Growth Promoters.
12. What are the Variable costs in aquaculture Feed Preparation?

(10×1=10)

Part B

*Answer any **six** questions.*

*Each question carries **5** marks.*

13. Explain the formation of Chyme. Comment on the digestion of fats in fishes.





14. Which are the major Minerals in Fish Nutrition? Comment on the functions, deficiency diseases and sources of any five of the Major Minerals.
15. What is meant by Balance Sheet of energy? Explain the different components in the balance sheet of energy.
16. Explain the different feed ingredients of Plant Origin.
17. Explain briefly the steps in the preparation of pelleted feeds.
18. Elaborate on the different factors affecting energy requirement in fishes.
19. What are the different factors to be considered in the process of feed formulation? Explain the different methods of feed Formulation.
20. Explain different systems of fish feeding or fish feeding devices in aquaculture.
21. Distinguish between Food Conversion Ratio and Food Efficiency Ratio. What is the application of these ratios in aquaculture?

(6×5=30)

Part C

*Answer any **two** questions.*

*Each question carries **10** marks.*

22. Describe the basic structure, classification and functions of fats and fatty acids in the body.
23. What are Food Additives? Explain different food additives and their functions in prepared feeds.
24. What is meant by Calorific value? Explain the different methods for estimating the calorific value of feedstuffs.
25. Describe the different equipments used in Feed manufacturing Mills and their importance.

(2×10=20)

