



**WEST BENGAL STATE UNIVERSITY**  
B.Sc. Honours 5th Semester Examination, 2020, held in 2021

**IFFADSE01T-INDUSTRIAL FISH AND FISHERIES (DSE1/2)**

**FISH FEED PREPARATION AND QUALITY CONTROL**

Time Allotted: 2 Hours

Full Marks: 40

*The figures in the margin indicate marks of question.  
Candidates should answer in their own words and adhere to the word limit as practicable.*

1. Answer any **seven** questions from the following: 2×7 = 14
  - (a) Write the scientific names of two major insect pests that are infesting foodstuff during storage.
  - (b) State the importance of protein in the dietary supplement of fish.
  - (c) Write the objective of pelleting during preparation of artificial feed.
  - (d) What is the role of Calcium and Magnesium in metabolic activities of fish?
  - (e) Why binder is essential for preparation of artificial feed?
  - (f) What is antioxidant? Give an example.
  - (g) Define protein efficiency ratio.
  - (h) How does mycotoxin affect fish health?
  - (i) Name two vitamin deficiency diseases of fish.
  
2. Write short notes on any **two** of the following: 3×2 = 6
  - (a) Chemical deteriorative changes during storage of feed
  - (b) Growth promoters and their importance
  - (c) Different types of pigments used for feed preparation
  - (d) Uses of preservatives in feed storage.
  
3. Answer any **four** questions from the following: 5×4 = 20
  - (a) Write major food ingredients used in preparation of artificial food for fish. 5
  - (b) Write notes on feeding rates and feeding frequency. 5
  - (c) What are probiotics and prebiotics? Write their importance in fish. 3+2
  - (d) What are the factors responsible for infestation of pest in feedstuffs during storage? 5

- (e) Write a note on different types of feeding devices used for supplementary feeding in fish. 5
- (f) Write an account of nutritional requirement of cultivable shell fish with special reference to shrimp. 5

**N.B. :** *Students have to complete submission of their Answer Scripts through E-mail / Whatsapp to their own respective colleges on the same day / date of examination within 1 hour after end of exam. University / College authorities will not be held responsible for wrong submission (at in proper address). Students are strongly advised not to submit multiple copies of the same answer script.*

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