

## Question Bank

### Fish Nutrition and Feed Technology

#### Part-A

##### Choose the correct answer

Q 1. The mathematical technique available to nutritionists for selecting the best combination of feed ingredients to formulate diets is

a) Quadratic programming b) **Linear programming** c) Best buy technique d) Peterson square method

Q 2. The major advantage of encapsulated diet is

a) Easy to consume b) **Water quality is not spoiled** c) Specified nutritional d) Easy to handle

Q 3. Anti-nutritional factors in plant protein sources can be destroyed by

a) **Heat treatment** b) Cold treatment c) Sun drying d) Chemical treatment

Q 4. The natural antioxidant used in the aqua feed is

a) BHA b) BHT c) **Vitamin E** d) Ethoxyquin

Q 5. The water stability of shrimp feed should be a minimum of

a) 30 min. b) 45 min. c) **2 hr** d) 5 hr.

#### Part-B

##### Fill in the blanks

Q 1. The most powerful anti-nutritional factor in plant ingredients is \_\_\_\_\_. (**Phytic acid**)

Q 2. The costliest commercial aquafeed is \_\_\_\_ feed. (**Medicated**)

Q 3. Moist feeds are suitable for \_\_\_\_\_. (**Sea bass**)

Q 4. The feed ingredient used as a binder in the feed formulation \_\_\_\_\_. (**Tapioca flour**)

Q 5. Feed intake can be increased by the addition of \_\_\_\_\_. (**Attractants**)

#### Part-C

##### State True or False

- |  |     |              |
|--|-----|--------------|
| 1. Carotenoid pigment present in Yeast.                                | ( ) | <b>False</b> |
| 2. Biological value in feed studies related to Nitrogen.               | ( ) | <b>True</b>  |
| 3. n-3 fatty acids are rich in Freshwater fish.                        | ( ) | <b>False</b> |
| 4. Limiting amino acids are Lysine & Methionine                        | ( ) | <b>True</b>  |
| 5. Digestion of protein and lipids is efficient in Herbivorous fishes. | ( ) | <b>False</b> |

### **Part-D**

#### **Match the Following**

<b>1</b>	Bio enrichment	<b>a</b>	Phytic acid
<b>2</b>	Herbs in Aquafeed	<b>b</b>	Glycine & Leucine
<b>3</b>	Anti-nutritional factor	<b>c</b>	cataract
<b>4</b>	methionine deficiency	<b>d</b>	Immunity
<b>5</b>	Limiting amino acids	<b>e</b>	Live feed

**Answer: 1-b, 2-d, 3-a, 4-e, 5-b**

### **Part-E**

#### **Answer the following question**

1. What do you mean by protein-sparing effect?
2. Define micro-encapsulated feed
3. Define feed additive. What are the types of feed additives and describe the role of additives in feed formulation briefly.
4. What is anti-nutritional feed
5. Define nutrient deficiency disease? What are the nutrient deficiency diseases describe briefly.