

**DIPLOMA IN FISH PRODUCTS TECHNOLOGY
(DFPT)**

00824

Term-End Examination

June, 2012

**BPVI- 044 : FISH BY-PRODUCTS AND WASTE
UTILIZATION (Theory)**

Time : 2 hours

Maximum Marks : 50

Note : *Attempt any five questions only. All questions carry equal marks.*

1. Define **any ten** of the following terms : **10x1=10**
 - (a) Fish meal
 - (b) Beche - de -mer
 - (c) Isinglass
 - (d) Shark Fin
 - (e) Squalene
 - (f) Kelp
 - (g) Algin
 - (h) Fish sauce
 - (i) HTST process
 - (j) Ageing
 - (k) Fish silage
 - (l) Nutra centicals

2. Explain the steps involved in production of Fish Meal. Draw a flow-chart of production of Fish Meal and Oil by Wet Reduction Method. **10**

3. Write short notes on *any two* of the following : $2 \times 5 = 10$
- (a) Industrial application of Fish Body Oils
 - (b) Steps involved in the manufacture of Isinglass
 - (c) Uses of shark fin and shark fin rays
4. (a) Explain the methods of harvesting sea weeds. 5
- (b) Describe the methods of extraction and purification of Agar. 5
5. Write short notes on *any two* of the following : $2 \times 5 = 10$
- (a) Preparation of Fish Soup Powder
 - (b) Advantages of Extrusion Process
 - (c) Packaging and storage of Fish Pickles.
6. What are the raw materials and equipments used in the preparation of fish flakes/wafers? Give its recipe. Draw the flow-chart indicating the different steps involved in preparation of cooked fish meat and flakes. 10
7. (a) Describe the method of preparation of Acid Fish Silage. 5
- (b) Draw the flow-chart indicating the different steps involved in separation of shark skin. 5
8. Explain in detail the different applications of chitin and chitosan. 10
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