

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

Term-End Examination

June, 2015

**BPVI-044 : FISH BY-PRODUCTS AND WASTE
UTILIZATION**

Time : 2 hours

Maximum Marks : 50

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

1. Define any ten of the following : **10x1=10**
- (a) Fish meal
 - (b) Denaturation of proteins
 - (c) Isinglass
 - (d) Shark fin rays
 - (e) Agar
 - (f) Fish sauce
 - (g) Antioxidants
 - (h) Fish silage
 - (i) Nutraceuticals
 - (j) Flocculation
 - (k) Squalene
 - (l) Collagen

2. (a) Describe the composition and nutritive value of fish meal. $5+5=10$
(b) Explain the application of fish meal in livestock feeding.
3. Describe the method of production of isinglass. How it is used in clarification of beverages ? $5+5=10$
4. What is beche-de-mer ? Describe the different steps in its production. $2+8=10$
5. Explain the different applications of fish body oils. 10
6. Explain the different steps in the extraction of agar. 10
7. Write short notes on **any two** : $2 \times 5 = 10$
(a) Carrageenan
(b) Sodium alginate
(c) Extraction of shark fin rays
8. How are fish liver oils classified ? Name any three methods for extraction of oil from class A livers. Mention the precautions to be taken for storage of fish liver oils. $2+3+5=10$
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