

*DFPT*

# *ASSIGNMENT*

*for*

*January 2011 Session*

## *Diploma in Fish Products Technology (DFPT)*

*(Developed with the Financial Support of Ministry of Food Processing Industries, Govt. of India)*



**School of Agriculture**

**Indira Gandhi National Open University**

**New Delhi – 110 068**

## **LAST DATE FOR SUBMISSION OF ASSIGNMENTS**

<b>Course Code</b>	<b>Last date</b>
BPVI-041	31 <sup>st</sup> March 2011
BPVI-042	15 <sup>th</sup> May 2011
BPVI-043	30 <sup>th</sup> June 2011
BPVI-044	16 <sup>th</sup> August 2011
BPVI-045	30 <sup>th</sup> September 2011
BPV-046	15 <sup>th</sup> November 2011

**Kindly submit your assignments at the concerned study centre within the due date as mentioned above**

Dear learner,

Assignments carry 30% weightage in the continuous evaluation process of a course. The term-end examinations carry 70% weightage.

The assignments will be evaluated by the Counsellors at the study centre and the respective weightage of marks will be added to their percentage of marks obtained at the term-end examination. Each candidate will have to complete assignments in order to appear in the term-end examination. Candidates are, therefore, advised to take assignments seriously and submit them in time.

### General Instructions

- 1) The validity of the assignments is ONE YEAR. If you fail to submit the assignments before the due date of the particular session, you are supposed to attempt the fresh set of assignment of subsequent January sessions.
- 2) Write your Enrolment Number, Name, Full Address and Date of Despatch at the top right-hand corner of the first page of your answer sheet.
- 3) Write the Programme Title, Course Title, Assignment Code, Code and Place of the Study Centre on the left-hand corner of the first page of your answer sheet.

The top of the first page of your answer sheet for each assignment should be as follows:

Programme Title .....	Enrolment No.....
Course Code & Title.....	Name .....
Assignment Code.....	Address .....
Study Centre (Code) .....	.....
Study Centre/TLC .....	.....
(Place) .....	Date .....

**Note:** Students are required to follow this format strictly otherwise the assignments will not be evaluated.

- 4) Your answer sheet should be complete in all respects. Make sure that you have answered to all the questions in assignments before you submit them. Incomplete answer sheets will lead to poor marks.
- 5) As far as possible students are advised to give the relevant points from the course material and elaborate their answers and explanations in their own language instead of reproducing the language of the course materials.
- 6) You are advised not to copy from the study material while attempting the assignments. In case it is found that the assignments have been copied from study material, you will be awarded zero marks.
- 7) Avoid copying from the answer sheets of other students. If copying is noticed, the assignments of such students will be rejected.
- 8) Use only foolscap size paper for your answers, ordinary writing paper, neither too thick nor too thin, will do. Assignments should be hand written, typed assignment are not acceptable.
- 9) Leave 3”margin on the left and at least 4 lines in between each answer in an assignment. This will enable your Counsellor to write useful comments in appropriate places. Write question number for each answer.
- 10) The coordinator of your Study Centre will return the evaluated assignments to you. This will also include a copy of assessment sheet containing global comments of the evaluator on your performance in the assignments. This will enable you to improve in your future assignments as well as in the term-end examinations.
- 11) The Assignments should be sent or submitted to the Programme In-charge of the Study Centre allotted to you.

## **BPVI-041: Introduction to Fish, Processing, Packaging and Value Addition**

**Max. Marks: 50**

**Due Date: 31<sup>st</sup> March 2011**

**Answer any five questions in about 800 words. All questions carry equal marks.**

- 1) Explain briefly the present status of fish and fisheries in our country?
- 2) Write a brief account of the four major types of spoilage mechanisms occurring in fish and stress as to how they help you to assess the spoilage of fish?
- 3) What do you know on the methods of handling wet fish on board a vessel? Describe in brief the different chilling methods practiced?
- 4) What are the different fishery products of commerce? Write a brief account of the different products citing suitable examples?
- 5) Write brief notes in two to three sentences on the following:
  - a) Air blast freezer
  - b) Cryogenic freezing
  - c) Principle of refrigeration
  - d) Individual quick freezing
  - e) Pouched products
- 6) Write brief notes on the following:
  - a) Vacuum packaging
  - b) Retort pouching
  - c) Safety aspects of packaging materials
  - d) Thermoforming packaging
  - e) Active packaging

## **BPVI-042: Mince and Mince Based Products**

**Max. Marks: 50**

**Due Date: 15<sup>th</sup> May 2011**

**Answer all questions (in about 700 words). All questions carry equal marks.**

- 1) What is fish mince? How it is produced? What are the fishes suitable for the production of fish mince? Add a brief account on the methodology of storage and shelf life of fish mince.
- 2) Write brief notes on the following:
  - a) Fish fingers
  - b) Fish cutlets
  - c) Fish balls
  - d) Fish noodles
  - e) Fish sausages

- 3) Define surimi. Explain the production and storage of surimi touching upon the various fish species used. Stress upon the problems facing the surimi industry.
- 4) Define analogue products. Write a brief account on analogue product preparation.
- 5) Write short note on:
  - a) Kamaboko
  - b) Grading parameters related to Quality evaluation of Surimi
  - c) Estimation of surimi quality parameters
  - d) Measuring functional properties of surimi
  - e) Japanese standard quality measurement system

### **BPVI-043: Coated Products**

**Max. Marks: 50**  
**Due Date: 30<sup>th</sup> June 2011**

#### **Section A (30 marks)**

**Answer all questions from Section A. All questions carry equal marks**

- 1) What is batter? Explain the different types of batter and their composition.
- 2) Write a brief account of the various ingredients used in batter and highlight their functions. Also describe as to what are critical coating factors.
- 3) What are breadings? How and why are they used?
- 4) Describe what you know regarding the functional properties of breadings?
- 5) Give an illustrated account of breading machinery and describe the breading process.
- 6) Write short descriptions on Types of batter and factors affecting batter formulation.

#### **Section B (20 marks)**

**Answer any 2 questions from Section B. Each question carries 10 marks**

- 7) Describe in brief the different steps in the actual process of coating.
- 8) Write short notes on:
  - a) Process line
  - b) Pre-dusting
  - c) Batter application process
  - d) Application of breading
  - e) Pre frying
- 9) Write what you have studied on preparation of coated products from Shrimp and squids.
- 10) Prepare a brief write up of moulded fish products.

## **BPVI-044: Fish By-Products and Waste Utilization**

**Max. Marks: 50**

**Due Date: 16<sup>th</sup> August 2011**

**Answer any five questions. All questions carry equal marks**

- 1) Write a brief essay on the raw materials used for production of fish meal and oil. Stress on the methods of handling and preservation of the raw materials? Add a short write up on the major methods of manufacture of fish meal?
- 2) Make brief notes on the uses of fish meal. Add an account on the importance of fish body oil and liver oil in human health?
- 3) Write short notes on:
  - a) Chitosan
  - b) Beche-de-mer
  - c) Isinglass
  - d) Shark fin rays
  - e) Squalene
- 4) What are sea weeds? Write a few lines on the commercially important sea weeds. Add a brief account of sea weed products?
- 5) What is chitin? How is it produced? Write a short account on the uses of chitin?
- 6) Define nutraceuticals. Write a brief account on nutraceuticals products produced from fish and shell fish?

## **BPVI-045: Quality Assurance**

**Max. Marks: 50**

**Due Date: 30<sup>th</sup> September 2011**

### **Section A**

**Attempt all questions in Section A. All questions carry 5 marks**

- 1) Quality and its upkeep. Write a brief account on this issue in relation to fish and fish products?
- 2) Write explanatory notes on the following:
  - a) Organoleptic parameters related to spoilage of fish
  - b) Chemical parameters indicating spoilage of fish
- 3) Write short descriptions on **any two** of the following:
  - a) Biological hazards
  - b) Chemical hazards
  - c) Physical hazards

- 4) What in your opinion is the importance of PFA act? How does it help in making food safe to the consumers?
- 5) Write a short essay on HACCP, its uses and its impacts on quality upkeep of food items.
- 6) How does ISO 22,000 help in food safety management?

### **Section B**

**Attempt all questions in Section B. All questions carry 10 marks**

- 7) Write a short account of **any four** of the following:
  - a) BIS standards
  - b) US, FDA standards
  - c) *Codex Alimentarius* standards
  - d) International standards
  - e) PFA Act
- 8) Write explanatory notes on **any four** of the following:
  - a) Odour in indicating fish spoilage
  - b) TMA
  - c) Sanitary survey
  - d) Pathogens
  - e) Tory Freshness Grading

## **BPV-046: Marketing and Entrepreneurship Development**

**Max. Marks: 50**

**Due Date: 15<sup>th</sup> November 2011**

### **Section A**

**Attempt any 4 questions in Section A. Each question carries 5 marks**

- 1) What is marketing? Stress on the importance of marketing. Write an account on the structure of markets?
- 2) What are marketing channels? Stress on the benefits offered by the channels?
- 3) Define marketing efficiency? How do you measure marketing efficiency?
- 4) Briefly define what demand is all about? Analyse the factors affecting demand?
- 5) Briefly explain what supply means? Identify factors that affect supply?
- 6) Distinguish between fixed costs and variable costs and marginal and average costs?
- 7) Write brief notes on **any two** of the following:
  - a) Cash Flow Statement
  - b) Cost Benefit Analysis
  - c) Internal Rate of Return

## Section B

**Attempt any 3 questions in section B. Each question carries 10 marks**

5) Write brief notes on:

- a) Price analysis
- b) Marketing research
- c) MIS
- d) Market planning
- e) Consumer behaviour

6) Write what you know on:

- a) Market segmentation
- b) Selling activity
- c) Managing sales
- d) Advertising
- e) Sales promotion

7) Write notes on:

- a) Public sector organization
- b) Co-operative movement
- c) Empowerment
- d) Entrepreneurship
- e) Bankable project