



ASSIGNMENTS

for

July 2016 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

Course Code	Last date
BPVI-041	15 th October 2016
BPVI-042	15 th November 2016
BPVI-043	15 th December 2016
BPVI-044	15 th January 2017
BPVI-045	15 th February 2017
BPV-046	15 th March 2017

- Kindly submit your assignments at the concerned study centre/PSC within the due date as mentioned above.
- Before submitting the examination form (March and September for June and December Term-end examinations, respectively), it is essential to submit the assignment and get authentication from Programme-in charge or Coordinator of the study centre/PSC for the courses you will be appearing for.

Note: First of all read the assignment/questions and instructions carefully and identify the components of an assignment. You should read the relevant sections and sub-sections of a unit while preparing your responses and write answers in your own words. Your responses should not be a verbatim reproduction of the textual materials/blocks provided for self-learning purposes. We also suggest that, you may read additional materials available in your study centre or in any other library before preparing your responses. But extra reading is not a must to answer these assignments.

Dear learner,

Welcome to the “Diploma in Fish Products Technology” (DFPT) programme.

We hope that you have gone through the Programme Guide of DFPT carefully. It is extremely important to complete the assignments within the stipulated time to be eligible to appear for the term-end examination. All the assignments of DFPT are Tutor Marked Assignments (TMAs) and are part of the continuous evaluation process. 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 Dispatch 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	Course Code & Title.....
Enrolment No.....	Name
Assignment Code.....	Address
Study Centre (Code)	Study Centre
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 all the questions in assignments before you submitting. 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 study material while attempting 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) Assignments should be sent/submitted to Programme In-charge of the study centre allotted to you.

Before attempting the assignments, please read the instructions carefully.

We suggest that you should retain a copy of your assignment responses.

Wishing you all the best for successful completion of the DFPT programme.

HAPPY LEARNING!

Programme Coordinator (DFPT)

Course Code: BPVI-041

Course Title: Introduction to Fish, Processing, Packaging and Value Addition

Maximum Marks: 50

Submission Date: 15th October 2016

Answer the following questions in 250-300 words. All questions carry equal marks.

1. Discuss about the important commercial marine fishes and prawns in India.
2. Define autolysis. Describe the changes occurring in fish after death.
3. What is K Value? What it is important? How it is calculated?
4. What are the common facilities required in an ideal fish landing centres?
5. Define canning. What are its advantages? Discuss in brief the different steps involved in conventional canning process.
6. Write short notes on any the following:
 - a) Sun drying
 - b) IQF
7. Discuss the following in six to seven sentences:
 - a) Exhausting
 - b) Pastuerization
 - c) HDPE
8. What are the different systems of packaging adopted in fish products? Explain in detail any one system of packaging.
9. Discuss about the packaging of frozen fish products.
10. Define value addition. What are the factors influencing value addition?

Course Code: BPVI-042

Course Title: Mince and Mince Based Products

Maximum Marks: 50

Submission Date: 15th November 2016

Answer the following questions in 250-300 words. All questions carry equal marks.

- 1) Define fish mince. How fish mince is used in the fish processing industry?
- 2) Give the flow chart for production of fish mince (Manual method).
- 3) Explain how we can improve the appearance and quality of minced fish.
- 4) Describe the process of preparing fish fingers with the help of flow diagram.
- 5) Explain the different steps involved in the preparation of fish sausage.

- 6) Explain surimi processing from dark muscle fishes.
- 7) What is crab analogue? Draw a flow diagram for preparation of crab stick.
- 8) Define moulded fish products. Describe the process of preparation of kamaboko.
- 9) Explain the methods of estimation of surimi quality parameters?
- 10) What is fricola? Describe the steps involved in the preparation of fricola.

Course Code: BPVI-043

Course Title: Coated Products

Maximum Marks: 50

Submission Date: 15th December 2016

Answer the following questions in 250-300 words. All questions carry equal marks.

1. Explain the parameters influencing the batter quality.
2. Differentiate between Home-style breadcrumbs and Japanese style crumbs.
3. What are the criteria a flavour should satisfy before incorporating in the breading?
4. Define portioning? Why and how it is done?
5. Illustrate the four types of coating systems using a flow diagram.
6. Explain any one equipment used for freezing and storage of processed fish products.
7. What are hazards? What are different types of hazards? Discuss about the chemical hazards in fish products?
8. Define coated fish fillet. Explain the process of preparation of coated fish fillets.
9. What are crab claw balls? What are the ingredients required for its preparation? Explain its preparation process through flow diagram.
10. Describe the process of depuration and shucking during preparing coated products from mussels, clams and oysters.

Course Code: BPVI-044

Course Title: Fish By-Products and Waste Utilization

Maximum Marks: 50

Submission Date: 15th January 2017

Answer the following questions in 250-300 words. All questions carry equal marks.

1. Explain the process of preparation of fish meal through wet reduction method.
2. Summarize the industrial applications of Fish body oils.

3. What is Isinglass? Give the raw material used for its preparation. Describe the steps involved in preparation of isinglass.
4. Describe the process of extraction of Squalene from shark liver.
5. What is Carrageenan? What are its uses in food and non-food industry?
6. Give the recipe of crab soup powder. Describe the steps involved in preparation of crab soup powder.
7. Explain the process of preparation of fish pickle with tamarind.
8. What is chitin? What are its sources? Give the flow diagram for preparation of chitin from the prawn/crab shell.
9. Summarize the advantages and uses of fish silage.
10. Define Nutraceuticals. What are the different nutraceuticals derived from fin fish? Explain any one in detail.

Course Code: BPVI-045

Course Title: Quality Assurance

Maximum Marks: 50

Submission Date: 15th February 2017

Answer the following questions in 250-300 words. All questions carry equal marks.

1. Expand SPS. Give the SPS Agreement principles. List the ten commandments of SPS Agreement.
2. What are organoleptic qualities? Give its importance? Discuss about organoleptic evaluation of fish and prawn.
3. What is food safety? What are its implications? Discuss briefly about the chemical hazards in fish.
4. Describe the quality standards stipulated by ISI for fish and fish products.
5. Explain about the benefits of ISO 22000.
6. Define HACCP. Briefly explain the major principles behind HACCP.
7. Discuss about the technical requirements of the Food Safety Management System.
8. Describe the subjective and objective methods of sensory assessment of fish and its products.
9. Discuss about the instrumental method of assessing seafood quality.
10. Identify the common pathogens present in seafood. Explain about any one organism in detail.

Course Code: BPV-046

Course Title: Marketing and Entrepreneurship Development

Maximum Marks: 50

Submission Date: 15th March 2017

Answer the following questions in 250-300 words. All questions carry equal marks.

1. Define direct marketing. What are its advantages? Give an example with respect to fish products.
2. What do you mean by Market functionaries? Discuss about the various market functionaries and their functions in marketing.
3. Describe about the different marketing channels in fisheries sector.
4. What do you understand by the term “Market Equilibrium”? Explain with suitable example.
5. Define the following:
 - a. Budget
 - b. Balance sheet
 - c. Break-even point
 - d. Current liabilities
 - e. Internal Rate of Return
6. Write short notes on:
 - a. Market Information System
 - b. Market Segmentation
7. Discuss about the steps involved in planning and managing advertising.
8. Define Empowerment. Briefly discuss about the process of empowerment.
9. Explain the skills an entrepreneur should possess.
10. Define project. Describe the characteristics of an ideal project.