

ASSIGNMENT BOOKLET

DIPLOMA PROGRAMME IN MEAT TECHNOLOGY (DMT)

Academic Session : July 2021



**School of Agriculture
Indira Gandhi National Open University
New Delhi – 110068**

Dear student,

As you are aware that for theory, the weightage to the term-end examination will be 80% and the weightage to the continuous assessment will be 20%. The continuous assessment is in form of assignments. There is one assignment for each course i.e. total eight assignments for the programme. Each assignment will be of 50 marks which ultimately will be converted to have weightage of 20 % of theory. Instructions to format your assignments are as follows:

Instructions to format your assignments

Before attempting the assignments, please read the following instructions carefully.

1. On top of the first page of your answer sheet, please write the details exactly in the following format.

Enrollment no:.....
Name:.....
Address:.....
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Course Code:.....
Course Title:.....
Study Centre:..... Date:.....
(Name and Code)

Please follow the above format strictly to facilitate evaluation and to avoid delay.

2. Use foolscap size paper for writing your answer.
3. Leave 4cm margin on the top, bottom and left of your answer sheet.
4. Clearly indicate question no. and part of the question being solved while writing answers.

Assignment No.	Date of Submission
Assignment 1 (BPVI-021) and 2 (BPVI-022)	Before 31 st December 2021
Assignment 3 (BPVI-023) and 4 (BPVI-024)	Before 31 st January 2022
Assignment 5 (BPVI-025) and 6 (BPVI-026)	Before 28 th February 2022
Assignment 7 (BPVI-027) and 8 (BPVI-028)	Before 28 th March 2022

5. Assignments have to be sent to the coordinator of your study centre.
6. We strongly suggest that you should retain a copy of your assignment responses.

Wishing you good luck.

Assignment – 1
Course Code: BPVI – 021

Maximum Marks – 50

Note: Attempt all the five questions.

Q.1.	(a) List the nutrients present in food and write three important functions of food.	5
	(b) Why carbohydrates are known as quick energy food? Name two stored form of carbohydrates.	5
Q.2	(a) Classify vitamins. Write the functions of vitamin C.	5
	(b) Explain the physiological roles of protein.	5
Q.3.	(a) Write the principles of meat preservation.	5
	(b) List the major and trace minerals. Give the functions of any one mineral in human body.	5
Q.4.	(a) Narrate the digestion carbohydrate in human body.	5
	(b) List the intrinsic parameters affecting microbial growth in food and explain any one parameter.	5
Q.5.	(a) Write short note on meat preservation by fermentation and irradiation of meat.	5
	(b) Explain the pattern of microbial growth in the food.	5

Assignment – 2
Course Code: BPVI – 022

Maximum Marks – 50

Note: Attempt all the five questions.

Q.1.	(a) List the factors to be considered for site selection of a meat plant and describe any one factor.	5
	(b) Briefly narrate the day-to day management of animal for optimum production.	5
Q.2.	(a) Give the meat animal population of India as per the 20 th livestock census. Explain the major constraints affecting India's meat export.	5
	(b) Describe the major components of an abattoir.	5
Q.3.	(a) Define stunning and explain any one stunning method.	5
	(b) What are the basic considerations for transport of meat animals?	5
Q.4.	(a) Explain the steps involved in slaughter and dressing of goat.	5
	(b) Write the objectives and decision/judgement of ante-mortem examination.	5
Q.5.	(a) Define zoonoses. List the meat borne bacterial zoonotic diseases.	5
	(b) Write the objectives of post mortem (PM) examination. What are the	

	facilities required for PM examination of carcass?	5
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Assignment – 3
Course Code: BPVI – 023

Maximum Marks – 50

Note: Attempt all the five questions.

Q.1.	(a) Briefly describe the structure of skeletal muscle.	7
	(b) Write a note on rigor mortis.	3
Q.2.	(a) Explain the composition of a typical mammalian muscle.	5
	(b) Describe the factors affecting meat composition.	5
Q.3.	(a) Write about the factors to be considered for the quality grading of meat.	5
	(b) What are the prerequisites of meat cutting? What do you mean by wholesale and retail meat cuts?	5
Q.4.	(a) Write short notes on pH of meat and water holding capacity.	5
	(b) List the methods of tenderization of meat and explain any one method.	5
Q.5.	(a) Write the advantages and disadvantages of hot processing of carcass.	5
	(b) List the methods of meat freezing and explain any one method.	5

Assignment – 4
Course Code: BPVI – 024

Maximum Marks – 50

Note: Attempt all the five questions.

Q.1.	(a) What are the purposes of meat processing?	5
	(b) Explain any two methods of meat processing.	5
Q.2.	(a) Define curing and explain the methods of dry curing and pickle curing.	5
	(b) What do you mean by moist heat cooking and microwave cooking?	5
Q.3.	(a) Define meat additives. List the binders, emulsifiers and preservatives used in meat processing.	5
	(b) Write the characteristics of economic formulation.	5
Q.4.	(a) List the indigenous and exotic meat products and describe any one of the.	5
	(b) Describe the process of canning of meat products.	5
Q.5.	(a) Narrate the steps for processing of Sausage.	5
	(b) Write the advantages of restructuring of meat and give the flow diagram for any one restructured meat product preparation.	5

Assignment – 5
Course Code: BPVI – 025

Maximum Marks – 50

Note: Attempt all the five questions.

Q.1.	(a) Classify the packaging materials with examples.	5
	(b) Write the functions of a food package.	5
Q.2.	(a) What are the packaging requirements for fresh meat and frozen meat?	5
	(b) What are the differences between retail and bulk packaging? List the performance evaluation tests for bulk packages.	5
Q.3.	(a) Define sensory evaluation. Who can become a sensory panelist for meat products?	5
	(b) List the difference tests for sensory evaluation and explain anyone test.	5
Q.4.	(a) Explain the HACCP principles.	5
	(b) List the management practices to be followed at animal farm for hygienic meat production and explain any one practice.	5
Q.5.	(a) List the detergents and sanitizers used in meat plant. Write the properties of a good sanitizer.	5
	(b) Write the steps for cleaning and sanitation of meat premises.	5

Assignment – 6
Course Code: BPVI – 026

Maximum Marks – 50

Note: Attempt all the five questions.

Q.1.	(a) Describe the structure of an egg with the help of a diagram.	5
	(b) Explain the factors used for grading of eggs.	5
Q.2.	(a) Describe any two methods of egg preservation.	5
	(b) Explain the BIS method of grading of eggs.	5
Q.3.	(a) Write about the packaging of eggs.	5
	(b) Give the method of egg powder preparation.	5
Q.4.	(a) Write about the nutritive value of poultry meat.	5
	(b) Briefly narrate the steps of fresh poultry processing.	5
Q.5.	(a) Write the steps of chicken tandoori preparation.	5

	(b) Explain the Indian grading system for grading of dressed chicken.	5
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Assignment – 7
Course Code: BPVI – 027

Maximum Marks – 50

Note: Attempt all the five questions.

Q.1.	(a) Briefly explain the steps of conversion of skin to leather.	5
	(b) What do you mean by by-products of meat industry? List the advantages of utilization of meat industry by-products.	5
Q.2.	(a) Give the steps of casing preparation.	5
	(b) List the poultry by-products. Give flow chart for preparation of feather meal.	5
Q.3.	(a) Describe the steps of gelatin preparation.	5
	(b) Write name of few equipments along with their uses in a by-product processing plant.	5
Q.4.	(a) Define rendering. What are the differences between dry rendering and wet rendering?	5
	(b) Explain the method of compost making from slaughterhouse wastes.	5
Q.5.	(a) Describe briefly the primary treatment of slaughterhouse effluents.	5
	(b) Write about the production of biogas from meat plant wastes.	5

Assignment – 8
Course Code: BPVI – 028

Maximum Marks – 50

Note: Attempt all the five questions.

Q.1.	(a) Write about the transport of meat animals.	5
	(b) Narrate the prevailing methods of sale of livestock in India?	5
Q.2.	(a) How can you increase the cooking yield of the meat products?	5
	(b) Explain the marketing channels for marketing of meat animals and meat.	5
Q.3.	(a) Describe different aspects to be considered for preparation of project report for a business.	5
	(b) Write a note on business plan outline.	5
Q.4.	(a) Write about the rules and regulations associated with meat products.	5
	(b) List the equipment required in a meat processing plant.	5
Q.5.	(a) What are the essential skills of an entrepreneur?	5
	(b) If you want to start a chicken dressing cum product processing plant where	5

	daily 500 birds will be processed, what will be the cost of your project?	
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