

ASSIGNMENT BOOKLET

DIPLOMA PROGRAMME

IN

MEAT TECHNOLOGY (DMT)

School of Agriculture

Indira Gandhi National Open University

New Delhi, 110068.

2019

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%, here is an instruction for formatting your assignment. 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.

Instruction for formatting your assignment

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.

Enrollmentno:.....

Name:.....

Address:.....

.....

.....

Course Code:.....

Course Title:.....

Study Centre:.....

Date:.....

(Name and Code)

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

1. Use foolscap size paper for writing your answer.
2. Leave 4cm margin on the top, bottom and left of your answer sheet.
3. 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
Assignment 3 (BPVI-023) and 4 (BPVI-024)	Before 31 st January
Assignment 5 (BPVI-025) and 6 (BPVI-026)	Before 28 th February
Assignment 7 (BPVI-027) and 8 (BPVI-028)	Before 31 st March

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

Wishing you good luck.

Assignment- 1

Course Code: BPVI-021

Total marks: 50

Answer all the questions given below.

Q.no.1		
a.	Define and give examples of following: (i) Energy yielding food, (ii) protective food and (iii) body building food.	6
b.	Give the classification of carbohydrates along with examples.	4
Q.no.2		
a.	Write the functions of protein in our body.	5
b.	Classify vitamins and write the functions of any two vitamins.	5
Q.no.3		
a.	Describe in brief the digestion of lipid in our body.	5
b.	Explain the role of three major and two trace elements in our body.	5
Q.no.4		
a.	Explain pattern of microbial growth along with a diagram.	5
b.	Describe intrinsic factors that affect microbial growth in food.	5
Q.no.5		
a.	Write short notes on (i) Food allergy (ii) Food borne diseases. (iii) High temperature preservation and (iv) Irradiation.	4x2.5=10

Assignment- 2

Course Code: BPVI-022

Total marks: 50

Answer all the questions given below.

Q.no.1		
a.	Name two breeds each of goat and poultry. Give the population statistics of livestock in India (Reference: www.nddb.org/information/stats/pop)	4
b.	Describe briefly the day to day management of meat animals.	6
Q.no.2		
a.	How will you select a suitable site for your meat processing plant?	6
b.	List the main components of an abattoir and explain any one component.	4
Q.no.3		
a.	What points should be considered for selection of an animal for meat purpose?	5
b.	Write about ante-mortem care of meat animals and ante-mortem inspection.	5
Q.no.4		
a.	Define 'stunning' and describe any one stunning method.	4
b.	Give the steps of slaughtering and dressing of goat and pig.	6
Q.no.5		
a.	Write short notes on the following: (i) Post-mortem inspection (ii) Edible offals (iii) Meat borne zoonoses (iv) Ritual slaughter	4x2.5=10

Assignment- 3

Course Code: BPVI-023

Total marks: 50

Answer all the questions given below.

Q.no.1		
a.	Narrate different structural components of skeletal muscle fiber and give a diagram.	5
b.	How is rigor mortis developed after slaughter of animal?	5
Q.no.2		
a.	Give the chemical composition of different species meat and write about meat fat.	5
b.	Describe the animal factors that affect meat quality.	5
Q.no.3		
a.	Write short notes on pH of meat and tenderness of meat.	5
b.	Write about freezing storage of meat.	5
Q.no.4		
a.	Describe the wholesale cuts of pig carcass.	5
b.	Explain the factors used to establish quality grades of carcass.	5
Q.no.5		
a.	Write short notes on the following: (i) Electrical stimulation of carcass (ii) Hot processing of carcass (iii) Handling of carcass (iv) Cold shortening of meat	4x2.5=10

Assignment- 4

Course Code: BPVI-024

Total marks: 50

Answer all the questions given below.

Q.no.1		
a.	What are the purposes of meat processing?	4
b.	Classify meat products according to particle size, according to degree of comminution and according to processing type.	6
Q.no.2		
a.	Define curing. Write the role of any two curing agents in curing of meat.	5
b.	Explain any two methods of curing along with their advantage and disadvantages.	5
Q.no.3		
a.	List the meat additives and write role of any two meat additives in meat processing.	5
b.	How will you prepare an economic formulation for any preparation of meat sausage?	5
Q.no.4		
a.	Define canning and give the steps of one popular canned meat product.	5
b.	List popular Indian meat products and give the flow diagram for one chunked meat product preparation.	5
Q.no.5		
a.	Write short notes on the following: (i) Enrobing of meat (ii) Fermented meat products (iii) Ham (iv) restructured meat products	4x2.5=10

Assignment- 5

Course Code: BPVI-025

Total marks: 50

Answer all the questions given below.

- Q.no.1
- a. What is meant by flexible packaging material? 2
- b. See the packaging and labelling of any one pre-packaged food product and write labelling information given on the packet. Give your comments whether packaging and labelling have been done as per the Food Safety and Standard Regulation (Packaging and labelling). (Reference: <https://archive.fssai.gov.in/home/fss-legislation/fss-regulations.html>) 8
- Q.no.2
- a. Write about packaging requirements of fresh meat and cooked meat. 5
- b. Define sensory evaluation. Write about any one sensory parameter of meat. 5
- Q.no.3
- a. What are the criteria to be considered for selection of specialized sensory panel? 5
- b. What quality assurance practices should be followed at kitchen level? 5
- Q.no.4
- a. Describe the SSOP for cleaning of equipment and working areas in a meat plant. 5
- b. Narrate the principles of HACCP 5
- Q.no.5
- a. Visit www.fssai.gov.in and go through the supplementary study materials for Food Safety and Standards Act. Write about the basic hygienic requirements to be followed in a meat processing plant. 10

Assignment- 6

Course Code: BPVI-026

Total marks: 50

Answer all the questions given below.

- Q.no.1
- a. Describe the structure of egg along with a diagram. 5
- b. What is candling? Explain the grading of eggs as per the BIS. 5
- Q.no.2
- a. List egg preservation methods and describe any two of them. 5
- b. Narrate the process of egg powder preparation. 5
- Q.no.3
- a. What points should be considered while designing and constructing a poultry processing plant. 5
- b. Briefly describe the slaughter and dressing of poultry. 5
- Q.no.4
- a. Describe the grading of dressed chicken as per Indian standards. 5
- b. Write about nutritive value of poultry meat. 5
- Q.no.5
- a. Write about types of freezers used for preservation of poultry meat. 4
- b. Give the recipe and preparation steps of chicken sausage. 6

Assignment- 7

Course Code: BPVI-027

Total marks: 50

Answer all the questions given below.

Q.no.1		
a.	Define and classify meat plant by-products.	4
b.	What are the benefits of utilization of animal by-products?	6
Q.no.2		
a.	Briefly narrate the process of conversion of skin into leather.	5
b.	How is casing prepared from animal intestine?	5
Q.no.3		
a.	Name five important equipment used in by-product processing plant and write their uses.	5
b.	Give the flow diagram for dry rendering of carcass. Write two major differences between dry and wet rendering.	5
Q.no.4		
a.	List the by-products available from poultry industry and give the flow diagram for feather meal preparation.	5
b.	Write the industrial uses of animal blood and give the steps of blood meal preparation.	5
Q.no.5		
a.	List the sources of wastes from abattoir. Why effluent treatment is necessary?	5
b.	Briefly describe the primary treatment of meat plant effluents.	5

Assignment-8

Course Code: BPVI-028

Total marks: 50

Answer all the questions given below.

Q.no.1		
a.	Explain the methods of sale followed for animals in India.	5
b.	Describe the mode of transport of meat animals.	5
Q.no.2		
a.	What is vertical integration system of marketing? Write four different marketing channels followed for meat in India.	6
b.	What are the problems in marketing of meat in India?	4
Q.no.3		
a.	Narrate the skills that one should have as an entrepreneur.	5
b.	What are the challenges that an entrepreneur may have to face?	5
Q.no.4		
a.	Narrate briefly the essential steps for evaluation of any business idea.	5
b.	What information are to be included in a project report for your business?	5
Q.no.5		
a.	What will be the production cost of chicken sausage assuming that 50kg emulsion is prepared in a day?	10