DVAPFV

ASSIGNMENT BOOKLET
for
July 2024 and January 2025 Sessions

DIPLOMA IN VALUE ADDED PRODUCTS FROM FRUITS AND VEGETABLES (DVAPFV)

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.

School of Agriculture
Indira Gandhi National Open University
New Delhi -110068

2024-25

Dear student,

Welcome to the "Diploma in Value Added Products from Fruits and Vegetables" (DVAPFV) programme.

We hope that you have gone through the Programme Guide of DVAPFV programme 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 DVAPFV programme are Tutor Marked Assignments (TMAs) and are part of the continuous evaluation process. The weightage to the Term-End Examination (TEE) will be 80% and Continuous Assessment (Assignment) will be 20%. There is one assignment for each course ¼Except BNRP-108½] with theory component, thus, a total of seven assignments for this programme. Each assignment will be of 50 marks which will be converted to have weightage of 20% of theory component.

Instructions to format your assignments

1. Before you write the assignments, read the instructions provided in the Programme Guide carefully and go through the course materials.
2. You are requested to go through the course material first and then complete the assignments. Your answers should not be a verbatim reproduction of the textual materials/blocks provided for self-learning purposes.
3. Use foolscap size paper for writing your answer. Leave 4 cm margin on the top, bottom and left of your answer sheet. Clearly indicate question no. and part of the question being solved while writing answers.
4. The Assignments should be sent or submitted to the Programme In-charge (PIC) of the Study Centre allotted to you.
5. We strongly suggest that you should retain a copy of your assignment responses.
6. On top of the first page of your answer sheet, please write the details exactly in the following format.

Enrollment no: ……..…….
Name: ……..……..
Address: ……
…….
…….

Course Code: ……..
Course Title: ……
Study Centre: …….. Date: …….
(Name and Code)

7. If you have any doubts or problems pertaining to the courses and assignments, do feel free to contact us at the School of Agriculture.

Please submit your assignments at the Study Centre allotted to you before the due date as mentioned below:

Course Code	**Last Date for July 2024 Session**	**Last Date for January 2025 Session**
BPVI-001 and BPVI-002	31st October 2024	31st May 2025
BPVI-003 and BPVI-004	31st December 2024	31st July 2025
BPVI-005 and BPVI-006	31st January 2025	31st August 2025
BPVI-007 and BPVI-008	28th February 2025	25th September 2025

Happy Learning! Wish you all good luck for successful completion of the programme.

School of Agriculture
Indira Gandhi National Open University,
Maidan Garhi, New Delhi-110068, India.

BPVI-001: FOOD FUNDAMENTALS

Maximum Marks: 50

Note: Answer all questions. Answer each question in about 500 words. All questions carry equal marks.

1. Write in detail about any five properties of food and their significance.
2. Explain the digestive process of food and list the components of digestive system of human.
3. Discuss the different causes responsible for food spoilage.
4. Explain the principle and methods of food preservation.
5. Describe the different methods used to retain the nutrients in food during processing and storage.

BPVI-002: PRINCIPLES OF POST HARVEST MANAGEMENT OF FRUITS AND VEGETABLES

Maximum Marks: 50

Note: Answer all questions. Answer each question in about 500 words. All questions carry equal marks.

1. Explain the pre-treatments and operations of fruits and vegetables.
2. Describe the different methods of pre-cooling fruits and vegetables.
3. Elaborate on the different freezing methods used for fruits and vegetables.
4. Discuss the low-cost storage structures for fruits and vegetables.
5. Explain the common types of dryers?

BPVI-003: Food Chemistry and Physiology

Maximum Marks: 50

Note: Answer all questions. Answer each question in about 500 words. All questions carry equal marks.

1. What is ripening? Describe the compositional changes that occur during ripening of fruits.
2. Define carbohydrate? Give a detailed classification of carbohydrates.
3. Explain the properties of fats and oils.
4. Explain the physiological disorders of tropical and sub-tropical fruits.
5. Discuss the important factors influencing the quality of wine.

BPVI-004: Food Processing and Engineering-I

Maximum Marks: 50

Note: Answer all questions. Answer each question in about 500 words. All questions carry equal marks.

1. What is evaporation? Explain the different types of evaporators.
2. Discuss the different methods to determine the moisture in food materials.
3. Describe the different material handling equipment in food processing industries.
4. Explain the process of producing tomato juice and tomato puree.
5. What feature should be considered for selection of proper site for a fruits and vegetables processing plant?

BPVI-005: Food Microbiology

Maximum Marks: 50

Note: Answer all questions. Answer each question in about 500 words. All questions carry equal marks.

1. Explain the process of manufacturing of red and white wine.
2. Explain the chemical changes associated with food spoilage.
3. What is relationship between pH and the heat resistance of microorganism? Give detailed classification of food based on the pH of food.
4. Describe the natural and microbial toxins in food and their effects on humans.
5. Classify the preservatives? Explain the mode of action of any two preservatives.

BPVI-006: Food Processing and Engineering-II

Maximum Marks: 50

Note: Answer all questions. Answer each question in about 500 words. All questions carry equal marks.

1. Explain in detail the different modes of heat transfer with suitable examples.
2. What is a heat exchanger? Explain the applications and types of heat exchangers.
3. Describe the approaches to control chilling injury in fruits and vegetables.
4. Explain the industrial products prepared from fruit and vegetables waste.
5. Describe properties, advantages and applications of glass containers.

BPVI-007: Food Quality Testing and Evaluation

Maximum Marks: 50

Note: Answer all questions. Answer each question in about 500 words. All questions carry equal marks.

1. What is HACCP? Describe the befits and principles of HACCP.

2. Explain the different approaches to measure the color of food materials.
3. Explain the principle and methods involved in determination of protein and pectin in food.
4. Describe the different test used for sensory analysis of food.
5. What principle is involved in a pH meter? Explain the component and working of a pH meter.

BPVI-008: Entrepreneurship and Marketing

Maximum Marks: 50

Note: Answer all questions. Answer each question in about 500 words. All questions carry equal marks.

6. Explain the entrepreneurial skill required to become a successful entrepreneur.
7. What is business? Describe the different feature of business.
8. What is marketing mix? Explain the different pricing strategies that may be adopted by a firm?
9. What are the stages of product life cycle? Explain how the market and product respond to marketing strategies during different life cycle stages of product.
10. What is performance measurement? Explain its need and benefits.