

ASSIGNMENT SET - I
Department of Nutrition

Mugberia Gangadhar Mahavidyalaya



Subject- B.Voc. in Food Processing

Semester-III

Paper Code: BVFPS303T

[FRUITS AND VEGETABLE PROCESSING TECHNOLOGY]

Answer all the questions

Unit-1

1. What is the current status of production and processing of fruits and vegetables as living products?(4)
2. What is the composition and nutritive value of different fruits and vegetables?(4)
3. How do fruits and vegetables spoil, and what factors contribute to their spoilage?(1+2)

Unit-2

- 1 How does osmotic dehydration contribute to the quality improvement of dehydrated products, and what are the factors that influence its effectiveness?
- 2 What role does water activity (Aw) play in determining the shelf life and quality of dried food products?

- 3 How does the choice of dehydration method impact the retention of nutrients in dehydrated fruits and vegetables?
- 4 What are some common challenges in maintaining the color, flavor, and texture of dried fruits and vegetables, and how can they be addressed?
- 5 Could you explain the differences in quality between spray drying and freeze drying methods for dehydrating food products?
- 6 How do different drying techniques affect the rehydration properties of dehydrated fruits and vegetables, and what implications does this have for their culinary use?

Unit -3

1. What is UHT (Ultra-High Temperature) processing, and how does it contribute to food preservation? (10)
2. What are the key factors to consider for successful implementation of UHT processing and aseptic packaging? (2)
3. What are the safety considerations and regulations associated with thermal processing methods, such as canning, bottling, UHT processing, and aseptic packaging?(5)

Unit-4

1. What are the different methods used for juice extraction from fruits and vegetables, and how do they differ in terms of efficiency and quality of the juice?(5)
2. How is clarification of juice achieved, and what techniques are commonly used to remove impurities and improve the clarity of fruit and vegetable juices?(5)
3. What is the process involved in the preparation of syrups, and how are they used in the production of fruit-based beverages?(5)

Unit -5

1. What is preservation by fermentation, and what are its advantages and disadvantages compared to other preservation methods?(5)
2. What are the different types of fermentation used in the preservation of fruits and vegetables, and how do they differ in terms of process and end products?(5+5)

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