

**ASSIGNMENT SET - IV**

**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 are the maturity standards for storage of fruits and vegetables, and what are the desirable characteristics of fruits and vegetables for processing?(5)
2. How is the supply chain management of fruits and vegetables organized, from production to consumption?(4)
3. What are the safety considerations and regulations associated with the production and processing of fruits and vegetables?

**Unit-2**

1. How does spray drying work, and what are its applications and challenges in dehydrating fruits and vegetables? (3)

2. What is freeze drying, and how does it help in preserving the nutritional quality of fruits and vegetables during dehydration? (2)
3. What are the principles and techniques involved in microwave drying of fruits and vegetables? (3)
4. How is heat pump drying used for efficient dehydration of fruits and vegetables, and what are its advantages? (3)
5. What is osmotic dehydration, and how is it applied to remove moisture from fruits and vegetables while maintaining their structure and flavor? (3)

### **Unit -3**

1. What is the process of blanching, and how does it contribute to food preservation? (2+2)
2. What are the steps involved in canning and bottling as a thermal processing method for food preservation? (3)
3. How does the canning and bottling process impact the nutritive value of foods? (4)

### **Unit-4**

1. How are squashes, cordials, and nectars produced, and what are the key differences between these fruit-based products?(6+4)
2. What are the principles behind the formation of jams, jellies, and marmalades, and what are some common defects encountered during their manufacturing process?(10)

**Unit -5**

1. What are the emerging technologies used in the processing of fruits and vegetables, such as hurdle technology, ozone application, and ultrasound? How do these technologies enhance preservation and quality?(10)
2. How does hurdle technology work in preserving fruits and vegetables, and what are the key factors and techniques involved?(5)

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