

**POST GRADUATE DIPLOMA IN FOOD
SCIENCE AND TECHNOLOGY (PGDFT)**

Term-End Examination

December, 2016

**MFT-009 : FRUIT AND VEGETABLE
TECHNOLOGY**

Time : 3 hours

Maximum Marks : 70

Note : Answer any five questions. All questions carry equal marks.

1. (a) Define the following : 7x1=7
- (i) Disinfestation
 - (ii) Ripening
 - (iii) Pre-cooling
 - (iv) Sorting
 - (v) Respiration
 - (vi) Canning
 - (vii) Dehydration
- (b) Discuss health benefits of fruits and vegetables. 7
2. Write short notes on **any four** of the following :
- (a) Controlled atmospheric storage. 4x3.5=14
 - (b) Vapour heat treatment
 - (c) Surface/wax coating
 - (d) Use of growth regulators in PHM of fruits and vegetables.
 - (e) Maturity index
 - (f) Post harvest diseases of fruits and vegetables.

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| 3. | (a) | Enlist the various steps involved in handling of the harvested produce and explain any two of them. | 7 |
| | (b) | Describe the role of storage temperature in harvested produce. | 7 |
| 4. | (a) | Classify the food based on pH or acidity. | 7 |
| | (b) | Enlist the various types of fruit juices and beverages and explain any two of them. | 7 |
| 5. | (a) | Describe aseptic processing and packaging in brief. | 7 |
| | (b) | Describe pre-drying treatments. | 7 |
| 6. | (a) | Describe marketing functions. | 7 |
| | (b) | Define Marketing Information System (MIS) and enlist the agencies providing market information. | 7 |
| 7. | | Differentiate between the following : | 14 |
| | (a) | Glazed and crystallized fruit | |
| | (b) | Pasteurization and sterilization | |
| | (c) | Jam and jelly | |
| | (d) | Modified atmospheric and controlled atmospheric storage | |
| | (e) | Drying and dehydration | |
| | (f) | Maturity and ripening | |
| | (g) | Preserve and candy | |

8. (a) Write full form of the following abbreviations : 7x1=7

- (i) VHT
- (ii) HWT
- (iii) RTS
- (iv) PFA
- (v) GMP
- (vi) IQF
- (vii) UHT

(b) Fill in the blanks : 7x1=7

- (i) India is the _____ producer of fruits and vegetables in the world after China.
- (ii) Removal of unwanted foliage, stems, roots and unmarketable parts from fruits and vegetables is called as _____.
- (iii) Vitamin C is highly essential for keeping blood vessels in good condition and for the prevention of _____.
- (iv) Papaya fruits are rich in Vitamin _____.
- (v) Anti oxidants present in fruits and vegetables help in reducing the risk of _____ attack.
- (vi) Molecules containing carbon, hydrogen and oxygen and primarily used as source of energy called _____.
- (vii) _____ are colouring matters present in the cells or tissues of fruits and vegetables.