

Total number of printed pages-4

53 (FPT 401) FPTC-I

2017

FOOD PRODUCT TECHNOLOGY-I

Paper : FPT 401

(Fruits and Vegetables)

Full Marks : 100

Time : Three hours

The figures in the margin indicate full marks for the questions.

Answer **any five** questions.

1. (a) Give two examples for climacteric and non-climacteric fruits. 2+2=4
- (b) Draw the graph showing different stages in fruit development. 2
- (c) Explain the Maturity Index with some examples. 10
- (d) Mention the functions of a packaging material. 4

Contd.

2. (a) Classify Fruits and Vegetables based on perishability. 4
- (b) Write about the chemical changes / deterioration of fruits during storage. 8
- (c) Define water activity and mention *any four* methods for measuring water activity. 2+2=4
- (d) Explain the concept of IMF. 4
3. (a) Explain the following sections in the construction of a controlled atmospheric storage system. 3+3+2=8
- (i) Humidity control
- (ii) Class control
- (iii) Scrubbers.
- (b) Define MAP and explain the machine systems used in MAP. 2+6=8
- (c) List the advantages and disadvantages of MAP. 4
4. (a) Give the flow chart for the processing of apple juice. 4

- (b) Provide the flow chart for the processing of fruit cordial. 4
- (c) Write down the types of fruit beverages. 4
- (d) Define the term-RTS fruit beverage and detail the process of making RTS fruit beverage with proper flow chart. 2+6=8
5. (a) Give the details about the manufacturing of Jam with flow chart and list the common production problems in Jam Making. 8+4=12
- (b) Explain the process of making sauce with suitable flow chart. 8
6. (a) What are candied fruits and explain the process of manufacturing candied fruits. 2+6=8
- (b) How glazed and crystallized fruits/vegetables are made? 6
- (c) Give the flow chart showing the process of making mango chutney. 6

7. (a) List the different types of Tea. 2
- (b) Give the overall chart showing the processing of different types of tea. 6
- (c) Explain about the importance of reducing enzyme activity in tea processing. 4
- (d) Explain the wet processing of coffee beans. 8