

Total number of printed pages-4

53 (FPT 401) FVPR

2019

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.

- (a) Classify fruits based on their maturity and ripening process. Give examples. 2+2=4

(b) Write the biochemical changes during ripening of fruits. 4

(c) Define Maturity Index. Explain *any five* maturity indices. 2+10=12

Contd.



2. (a) Explain about the curing process of roots, tubers and bulb crops. 8

(b) Summarize the benefits of artificial waxing. 4

(c) Discuss about the chemical deterioration/changes in fruits during storage and its preventive measures. 8

3. (a) Write short answers for the following terms : 4x2=-8

(i) Water activity

(ii) Intermediate Moisture Foods (IMF)

(iii) CAP

(iv) MAP.

(b) Match the following : 4x1=4

Substances	Working Mechanisms
(i) Glucose	- Inhibit Microorganisms
(ii) Sulphites	- Reduce 9W
(iii) Potassium sorbate	- Prevent browning
(iv) Citric acid	- Reduce pH

(c) Discuss about the temperature control and humidity control during the construction of CA (Controlled Atmosphere) rooms. 8

4. (a) Discuss about the machine systems for MAP (Modified Atmosphere Packaging). 6

(b) Explain the process of Juice manufacturing with proper flowchart. 10

(c) Give the flowchart showing the production process of frozen fruits and vegetables. 4

5. (a) Mention the flow sheet for the processing of Cordial and explain it. 10

(b) Provide flowchart for the following products : 5+5=10

(i) Cider

(ii) Wine.

6. (a) Give the technological flowchart for Jam making and explain the process in short. 5+8=13



(b) Mention the flow diagram for Ketchup processing and mention any two production problems. 5+2=7

7. (a) Mention the types of tea. 5

(b) Give the flowchart showing the overall view of Cashew nut processing. 5

(c) Explain about the net processing method of Coffee manufacturing process. 10

