53 (FPT 401) FPT-I

2016

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) Define Maturity Index and explain any five maturity indices used during the harvesting of fruits and vegetables.

3+10

(b) Write in detail about the various cooling methods used in the storing of fruits and vegetables.

- 2. (a) Draw the chart showing the relationship of food deterioration as a function of water activity.
 - (b) Write about the Intermediate Moisture Food (IMF) concept. 5
 - (c) Write about the recommended substances to reduce pH. 10
- 3. (a) Discuss about the various gases used in MAP.
 - (b) Write about the gas flushing and compensated vacuum machine systems used in MAP and also explain the methods for creating MAP.
- 4. (a) Define CAP. Mention the factors to be considered during CAP storage.

3+3

- (b) Explain the following facilities in creating in CA rooms: 4+4+3+3
 - (i) Temperature control
 - (ii) Humidity control
 - (iii) GAS control
 - (iv) Scrubbers

- 5. (a) Explain the pre-processing steps involved in the processing of fruits and vegetables.
 - (b) Give the process of flow charts for the following products: 5+5
 - (i) Tomato paste
 - (ii) Fruit juice concentrate
- 6. *(a)* Explain the process of making Jam with suitable flow chart.
 - (b) List out the common problems in Jam production. 10
- 7. (a) What are all the different types of tea and explain the processing steps involved in tea with suitable flow chart.
 - (b) Draw the flow chart showing the various steps in the processing of cashew nuts.