CENTRAL LIBRARY
JALPAIGURI INSTITUTE OF TECHNOLOGY, KODALIHAR

Total number of printed pages = 3

19/4th Sem/UFET 401

2022

FOOD PRODUCT TECHNOLOGY - I
(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) Mention the biochemical changes occurring during the ripening of fruits. 4

   (b) Write in detail about the curing process for roots, tubers, and bulb crops. 8

   (c) Write about any four cooling methods for extending the shelf life of fruits. 8

2. (a) Briefly explain the microbiological changes which are responsible for the deterioration of fruits and vegetables and mention the preventive measures for microbiological deterioration. 10

[Turn over

(b) What is the concept of zero energy cool chambers ? How it is constructed ? Explain the operation of ZECC. 10

3. (a) Why wax coating/edible coating is required in fruits ? Explain about any two methods for applying the coatings. 4+4=8

(b) Write short note on the VHT process for fruits and vegetables. 8

(c) What are the problems with pre-packaging of fruits and vegetables ? 4

4. (a) Give production flow chart for any two of the below mentioned products : 2×5=10

(i) Apple juice

(ii) Grape juice

(iii) Squash

(iv) Cordial.

CENTRAL LIBRARY CENTRAL INSTITUTE OF TECHNOLOGY

(b) How fruit juice concentrates/purees are manufactured ? Provide flow chart for the process. Mention the quality problems also. 10

5. (a) Explain the production process of cider with suitable flow chart. 10

(b) Give details about any two methods for determining the end point in Jam making process. 6

(c) What are the production problems in the Jelly making ? 4

6. (a) Explain the manufacturing process of pickle with proper flow chart. 10

(b) What is a fruit preserve ? Explain about any one of the method for the production process of fruit preserve. 2+4=6

(c) Give the flow diagram for tomato ketchup making process. 4

7. (a) Explain about the dry processing method for the production of coffee powder. 10

(b) How enzyme activity is reduced in tea leaves during its processing ? 4

(c) Explain the different stages in leaf maceration during the production of tea. 6

CENTRAL LIBRARY
CENTRAL INSTITUTE OF TECHNOLOGY