

**SIXTH SEMESTER (CUCBCSS—UG) DEGREE [SPECIAL] EXAMINATION  
MARCH 2021**

Food Technology

FTL 6B 18—TECHNOLOGY OF FRUITS, VEGETABLES, SPICES AND PLANTATION  
CROPS

(2017 Admissions)

Time : Three Hours

Maximum : 80 Marks

**Section A**

*Answer all questions.  
Each question carries 1 mark.*

1. Theanine is a protein found in tea. True or false.
2. Ginger contains starch in significant amounts. True or false.
3. Simple sugars lower the water activity of water. True or false.
4. Pectin is found in jackfruit. True or false.
5. Sublimation occurs during freeze-drying process. True or false.
6. Capsaicin is found in \_\_\_\_\_.
7. Pin heads are a grade of black pepper. True or false.
8. Spice can be irradiated. True or false.
9. Lemons and limes are non-climacteric. True or false.
10. Fannings are also called \_\_\_\_\_.

(10 × 1 = 10 marks)

**Section B**

*Answer at least four questions.  
Each question carries 2 marks.  
All questions can be attended.  
Overall Ceiling 8.*

11. Differentiate jam and marmalade.
12. Briefly explain the curing of cardamoms.
13. Explain, how enzymes are deactivated during heat treatment ?
14. List out the changes in coffee beans during roasting.
15. Pectinases are not suitable for retting. Comment and justify your answer.

**Turn over**

16. Define CTC process.
17. Write down the general composition of white chocolate.

(4 × 2 = 8 marks)

### Section C

*Answer at least four questions.*

*Each question carries 8 marks.*

*All questions can be attended.*

*Overall Ceiling 32.*

18. Briefly explain the role of enzymes on the quality attributes in fruits and vegetables.
19. Draw the flow diagram for the production of tomato puree.
20. Draw the flow steps involved in the production of curcumin powder.
21. Differentiate between climacteric and non-climacteric ripening with examples.
22. Briefly explain the pickling process highlighting the physico-chemical and microbial aspects.
23. Briefly explain the oleoresin preparation from fresh ginger.
24. Explain the role of pectin in the production of fruit jam.
25. Draw a flow diagram for the production of instant coffee powder from freshly harvested coffee beans.

(4 × 8 = 32 marks)

### Section D

*Answer any two questions.*

*Each question carries 15 marks.*

26. Describe the processing steps in the production of ready to drink mango drink from mango fruits with a flow diagram.
27. Discuss various fermentation methods involved in cocoa bean processing. Briefly discuss the changes that occur during the fermentation process in cocoa beans.
28. What is retting process? Explain various methods involved in the preparation of white pepper in detail.
29. What is canning? Mention its advantages. Explain the processing steps involved in the canning of pineapples.

(2 × 15 = 30 marks)