

C 1181

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Name.....

Reg. No.....

**SIXTH SEMESTER (CUCBCSS—UG) DEGREE 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. Most of the volatiles have a molecular weight less than 300 Da. True or false.
2. Give an example of a spice that contains a significant amount of starch.
3. NaCl in water lowers the water activity. True or false.
4. Milk chocolate contains cocoa solids. True or false.
5. The bulk density of white pepper is lower than black pepper. True or false.
6. Sulphur dioxide can be used for the bleaching of cardamoms. True or false.
7. The quality of the freeze-dried coffee powder is lower than spray dried coffee powder. True or false.
8. Strawberries are climacteric fruits. True or false.
9. All spice contains Eugenol. True or false.
10. Name the enzyme responsible for browning in fruits and vegetables.

(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. Mention the fssai specifications for tomato puree.
12. What is a fanning in tea industry ?

Turn over

13. Give two examples of spices belonging to monocot and dicots.
14. What is retting and mention one of its application in spice industry ?
15. What is a candied fruit ?
16. What is an essential oil ?
17. Mention at least 4 organic acids used as preservatives in fruit products.

(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 discuss about the changes occur during fermentation process in cocoa beans.
19. Briefly explain the methods to prevent enzymatic browning in fruits and vegetables.
20. Explain foam mat drying process with an example.
21. Briefly explain the jelling mechanism of pectin in obtaining fruit jam texture with chemical structure.
22. Differentiate between controlled atmospheric storage and modified atmospheric storage with examples.
23. Briefly explain the chemistry behind the long shelf life of pickled vegetables.
24. Briefly explain the processing steps in the preparation of black tea dust.
25. Draw a flow diagram for the production of chilly oleoresin from dried red chilly. Provide two application of chilly oleoresin in foods.

(4 × 8 = 32 marks)

Section D

Answer any two questions.

Each question carries 15 marks.

26. Describe the processing steps in the production of a fruit nectar of your choice with process flow diagram.
27. Explain the processing steps involved in the production of ginger garlic paste with flow diagram.
28. What are the main varieties of cardamom grown in India ? Explain various processing and extraction steps involved in production of value added products from cardamom.
29. Briefly describe the advantages of canning over cold storage. Explain the processing steps involved in canning of seedless jackfruit bulbs.

(2 × 15 = 30 marks)