

20U5109

(Pages: 2)

Name:

Reg. No:

FIFTH SEMESTER B.Voc. DEGREE EXAMINATION, NOVEMBER 2022

(Regular/Supplementary/Improvement)

CC18U SDC5 TF21 - TECHNOLOGY OF FRUITS AND VEGETABLES

(Food Processing Technology)

(2018 Admission onwards)

Time: Three Hours

Maximum: 80 Marks

PART-A

Answer *all* question. Each question carries 1 marks.

1. Red color in ripe tomato is due to _____
2. The purpose of blanching is _____
3. Acid present in grape is _____
4. Canning is also known as _____
5. Instrument used to measure TSS is _____
6. Percentage of pectin in jelly
 - a. 1
 - b. 5
 - c. 20
 - d. 10
7. Brine strength is measured by
 - a. Photometer
 - b. Calorimeter
 - c. Refractometer
 - d. None of the above
8. The enzyme present in fruits that hydrolyse pectin is
 - a. Pectin methyl esterase
 - b. Pectin ethyl esterase
 - c. Pectin ethyl peroxidase
 - d. Pectin methyl peroxidase
9. Ascorbic acid present in fruit act as
 - a. Antibacterial
 - b. Antibiotic
 - c. Antidepressant
 - d. Antioxidant
10. Mineral nutrition applied to fruits to extend the post-harvest life
 - a. Magnesium
 - b. Calcium
 - c. Phosphorus
 - d. All of the above

(10 × 1 = 10 Marks)

PART B

Answer any *eight* questions. Each question carries 2 marks.

11. Differentiate climacteric and non-climacteric fruits.
12. Briefly explain canning.
13. CAP and MAP.
14. Principle of freeze drying.
15. Define pectin.
16. What are the maturity indices of fruits and vegetables?

17. What is syneresis of jam?
18. Types of browning with examples.
19. What are the factors affecting gel formation?
20. Name the pectin degrading enzymes.
21. Differentiate sauce and ketchup.
22. What is the function of salt in pickling?

(8 × 2 = 16 Marks)

PART C

Answer any *six* questions. Each question carries 4 marks.

23. Define pickling process and its defects
24. Write about black neck formation in tomato ketchup and how to prevent it.
25. What you mean by crystallization in jam production and what are the measures to overcome this problem.
26. Write in brief about enzyme inactivation of fruits and vegetables.
27. Explain foam mat drying with an example.
28. Briefly explain the methods to prevent enzymatic browning in fruits and vegetables.
29. Describe the methods of determining the pectin content fruit products.
30. Define fruits ripening, write about the physico- chemical and physiological changes associated with fruit ripening process.
31. Briefly explain tomato ketchup. Give the specification.

(6 × 4 = 24 Marks)

PART D

Answer any *two* questions. Each question carries 15 marks.

32. Principle of canning and describe in detail the various unit operations involved in canning of fruits.
33. Steps involved in manufacture of jams. Discuss defects in jam.
34. The principle of dehydration, methods of drying and advantages and disadvantages of different types of dryers.
35. Describe the processing steps in the production of nectar with process flow diagram.

(2 × 15 = 30 Marks)
