

STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI - 86
(For candidates admitted during the academic year 2016 – 2017 & thereafter)

B.Voc. DEGREE EXAMINATION, NOVEMBER 2023
FOOD PROCESSING AND QUALITY CONTROL
FIFTH SEMESTER

COURSE : MAJOR CORE
PAPER : POST HARVEST TECHNOLOGY
SUBJECT CODE : 16VF/VM/PH56
TIME : 2 HOURS

MAX.MARKS: 50

SECTION- A

ANSWER ALL QUESTIONS:

(20X1=20)

I. Choose the correct answer

1. The ideal method for preparation of milk powder is
(a) Tunnel drying (b) Drum drying (c) Spray drying (d) Fluidized bed drying
2. The instrument that is used to test the firmness of fruit is
(a) Refractometer (b) Penetrometer (c) Texture analyzer (d) None of the above
3. Plant hormone that play a key role in the ripening and senescence of fruits and vegetables is
(a) Papain (b) Auxins (c) Ethylene (d) None of the above
4. Precooling is done to reduce _____.
(a) pH (b) Moisture (c) Field heat (d) Dirt
5. "Surface pitting" is a characteristic chilling injury in
(a) Apple (b) Pineapple (c) Citrus (d) Banana
6. Ripening is the _____ stage in the post-harvest lifespan of foods
(a) First (b) Second (c) Third (d) Fourth

II. Match the following:

- | | | |
|------------------------|---|--------------------|
| 7. Browning of fruits | - | Hot water |
| 8. Organic acid | - | Oxygen scavenger |
| 9. Vegetable blanching | - | Malic acid |
| 10. Iron powder | - | Ascorbic acid |
| 11. Citric acid | - | Aluminium foil |
| 12. Package | - | Maturity indices |
| 13. Harvesting | - | Polyphenol oxidase |

III. Fill in the blanks

14. Any one maturity index of banana is _____.
15. Mild heat treatment given to vegetables to reduce enzymatic activity is _____.
16. The _____ measures the colour of foods based on lightness, redness & yellowness.
17. Most suitable material for canning vegetables is _____.

IV. Answer in a sentence:

18. What is Lyophilization?
19. List any two causes for post-harvest loss.
20. Necessity for waxing and curing.

SECTION B**ANSWER ANY SIX QUESTIONS:****(6×3=18)**

11. Draw the food pipeline for cereal and highlight the areas of losses.
12. List the objectives of Post-harvest processing.
13. Mention the biological factors that affect the yield of the produce in terms of quantity
14. How do genetic factors boost the yield of a produce?
15. Recall the methods ideal for storing grains.
16. What are the chemical methods for checking the maturity of produce?
17. What are the different visual features used to estimate the maturity of crops?
18. Write a note on recent trends in food packaging.
19. List the environmental factors that causes harvest losses.
20. What is 'underground storage'?

SECTION C**ANSWER ANY TWO QUESTIONS:****(2×6=12)**

21. Enumerate on factors that will affect the quality of produce during storage.
22. What are the recent developments in the field of freezing foods?
23. Compare mechanical and manual harvesting and suggest which harvesting systems is best for agri produce.
24. How is Irradiation used as a method in post-harvest processing?
