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

B.Voc. DEGREE EXAMINATION, NOVEMBER 2024 FOOD PROCESSING AND QUALITY CONTROL FIFTH SEMESTER

: MAJOR CORE
: POST HARVEST TECHNOLOGY
: 16VF/VM/PH56
: 5 HOURS

MAX.MARKS:100 (Theory: 50 Marks + Practical: 50 Marks)

SECTION-A

ANSWER ALL QUESTIONS:

(20 x 1 = 20)

I. Choose the correct answer

1. The most suitable method for vegetable blanching is			
(a) Hot water	(b) Steam	(c) Sun rays	(d) Microwave
2. Which among the following has pro-vitamin A activity?			
(a) Lycopene	(b) β -carotene	(c) Xanthophyll	(d) Lutein
3. HP processing of fruit and vegetables means			
(a) High performance	(b) High pressure	(c) High pasteurization	(d) Heavy Performance
4. The enzyme which is responsible for browning of fruits is			
(a) Polyphenol - oxidase	(b) Lipo - oxidase	(c) Amylase	(d) Protease
5. Most suitable material for canning of vegetables is			
(a) Glass	(b) Paper	(c) Plastic	(d) Aluminum

II. Match the following:

- 6. Surface pitting- Oxygen scavenger
- 7. Lycopene Evaporative cooling
- 8. Iron powder Citrus
- 9. Firmness Tomato
- 10. Storage life Cabbage

III. Fill in the blanks:

- 11. The enzyme that produces the bad smelling aldehydes in vegetables is ______.
- 12. Main objective of vegetable blanching is ______.
- 13. The main objective of post-harvest processing techniques is ______.
- 14. The deviation from normal atmosphere composition is called as ______.
- 15. Ethylene is a _____ enzyme.

 $(6 \times 3 = 18)$

 $(2 \times 6 = 12)$

IV. Answer in a sentence:

- 16. What is MSP?
- 17. Mention any one factors that could result in grain loss during storage.
- 18. What do you mean by Mulching?
- 19. What is dehydro freezing?
- 20. Explain Irradiation

SECTION B

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ANSWER ANY SIX QUESTIONS:

- 21. List the elements of post harvest system.
- 22. Draw a food pipeline for a fruit sector highlighting the areas of losses.
- 23. What biological factors will affect the yield of the produce in terms of quantity?
- 24. Explain the ideal method to store highly perishable products.
- 25. List the importance of PHT.
- 26. What are the on-farm primary processing methods adopted to minimize post harvest loss?
- 27. What are the various indices used to ascertain the maturity of the produce?
- 28. Compare mechanical harvesting with manual harvesting.
- 29. Explain about ethylene evolution rate and ethylene scavengers?
- 30. What are the visual features used to estimate the maturity of crops?

SECTION C

ANSWER ANY TWO QUESTIONS:

31. What are the various biological factors that could cause harvest loss?

- 32. How are fruits or vegetables canned? What are the pre-requisites to be considered?
- 33. Elaborate the recent trends of packaging and packaging materials
- 34. Enumerate the advantages and disadvantages of Mechanical and Hand Harvesting.
