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

SUBJECT CODE: 16VF/VM/PH56

B.Voc. DEGREE EXAMINATION, NOVEMBER 2022 FOOD PROCESSING AND QUALITY CONTROL FIFTH SEMESTER

| COURSE | : MAJOR CORE |
|--------|---------------------------|
| PAPER | : POST HARVEST TECHNOLOGY |
| TIME | : 5 HOURS |

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

SECTION-A

ANSWER ALL QUESTIONS:

(20X1=20)

I. Choose the correct answer

| 1. Which organic acid is pres | sent in apple? | | | | |
|--|--------------------|-------------------|------------------|--|--|
| (a) malic acid | (b) citric acid | (c) tartaric acid | (d) benzoic acid | | |
| 2. Which among the following is not a post harvest loss? | | | | | |
| (a) Qualitative | (b) Quantitative | (c) Physiological | (d) Genetical | | |
| 3. Lycopene is present in | | | | | |
| (a) Citrus | (b) Mango | (c) Tomato | (d) Cucumber | | |
| 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:

| - | Ripening enzyme |
|---|-----------------------|
| - | Firmness |
| - | Citrus |
| - | Peroxidation |
| - | Enzymatic browning |
| - | Maturity indices |
| - | post harvest loss |
| | - - - - - |

III. Fill in the blanks

- 13. Main objective of vegetable blanching is _____.
- 14. The principle method used to dehydrate coffee beans extract ______.
- 15. Causative spoilage organisms of dried fruits and vegetables are ______.
- 16. Cutting the fruits will accelerate the ______ activity.

IV. Answer in a sentence:

- 17. List any two novel methods of freezing.
- 18. What do you mean by Anti freezing protein?
- 19. List any two problems encountered in mechanical harvesting.
- 20. Draw the structure of Food pipeline.

SECTION B

ANSWER ANY SIX QUESTIONS:

- 21. List the objectives of Post-harvest processing.
- 22. What are the pre-harvest factors that can contribute to harvesting loss?
- 23. Briefly explain 'underground storage' and write its applications
- 24. How can genetic factors boost the yield of a produce?
- 25. What are the different methods of storing grains?
- 26. What are the different physical features used to estimate the maturity of crops?
- 27. Write a note on the recent trend in food packaging.
- 28. Compare mechanical harvesting with manual harvesting.
- 29. Explain Impingement freezing in brief.
- 30. What biological factors will affect the yield of the produce in terms of quantity?

SECTION C

ANSWER ANY TWO QUESTIONS:

- 31. What are the various indices used to ascertain the maturity of the agricultural produce?
- 32. How are fruits or vegetables canned? What are the pre-requisites to be considered?
- 33. Explain in detail about ecofriendly packaging materials
- 34. What is the different storage techniques used for harvested goods storage?

(2×6=12)

(6×3=18)