STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI 600 086 (For candidates admitted during the academic year 2016-17 & thereafter)

SUBJECT CODE: 16VF/VE/FP45

B.Voc. DEGREE EXAMINATION, APRIL 2019 FOOD PROCESSING AND QUALITY CONTROL FOURTH SEMESTER

COURSE : MAJOR ELECTIVE PAPER : FOOD PACKAGING

TIME : 3 HOURS MAX.MARKS: 100

SECTION - A

ANSWER ALL QUESTIONS (20 X 1 = 20)

I. Choose the right answer:

1. HDPE is a type of

a) Paper b) Laminate c) Plastic

2. Avoiding Head space while packaging butter is

a) Necessary b) not essential c) Very important

3. Basic functions of a packing material are

a) Cost b) Protection c) Promotion and Preservation

4. Most baked goods are packed using

a) LDPE bags b) HDPE c) Propylene

5. Retort pouches are an example for

a) flexible packages b) rigid package c) paper packaging

II. State whether true or false:

- 6. Glass has excellent inertness.
- 7. Aluminium foil has the best barrier property among all other flexible laminates.
- 8. Silica gel, Calcium oxide, Calcium chloride should not be used as in-pack desiccants.
- 9. Oxidation and rancidity are two mechanisms of nutrient deterioration in foods.
- 10. Filling speed of VFFS is 3 12 packs per minute.

III. Expand:

- 11. LDPE
- 12. HDPE
- 13. PE
- 14. HTST
- 15. UHT

IV. Explain:

- 16. Shrink package
- 17. FFS
- 18. Migration test
- 19. MAP
- 20. Edible films

SECTION B

Answer any FOUR questions:

 $(4 \times 10 = 40)$

- 21. Give an account of Packaging requirements.
- 22. Elaborate the characteristics and advantages of using glass containers.
- 23. Explain the properties of tensile strength, tearing resistance and puncture resistance.
- 24. Discuss the rigid and flexible forms of packaging.
- 25. Describe the packaging of poultry and sea foods.
- 26. Comment on Vacuum and gas packaging machine.

SECTION C

Answer any TWO questions:

 $(2 \times 20 = 40)$

- 27. Give a detailed account of edible films and Laminated plastic material. Add a note on biodegradable plastics.
- 28. Describe the Packaging system for dehydrated foods, fresh fruits and vegetables.
- 29. What are the types of cans? Draw diagrams for the same and explain.
- 30. Highlight the recent trends in Packaging. Add a note on Nanoparticles in food packaging.
