



**LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034**

**M.Sc. DEGREE EXAMINATION – FOOD CHEMISTRY AND FOOD PROCESSING**

**FOURTH SEMESTER – NOVEMBER 2016**

**FP 4807 - FOOD PRODUCT DEVELOPMENT & PACKAGING TECHNIQUES**

Date: 14-11-2016  
Time: 01:00-04:00

Dept. No.

Max. : 100 Marks

**Part A**

**Answer all the questions.**

**10 x 2 = 20 marks**

1. What is a traditional food product?
2. Define a cyber team.
3. Mention the classification of a new food product.
4. List the reasons for failure of a new food product in the Indian context.
5. What are the sources of new product ideas?
6. Define primary packaging.
7. Name the noble gases used in food packaging.
8. Define threshold.
9. Enumerate the advantages of glass as a packaging material.
10. Mention the importance of nutritional labeling

**Part B**

**Answer any eight questions.**

**8 x 5 = 40 marks**

11. Distinguish between product innovation and process innovation of traditional products.
12. Bring out the four stages of team development.
13. Discuss the impact of marketing mix on a product.
14. What is positioning? Discuss the factors affecting new product positioning.
15. Highlight the process of food product authorization.
16. Discuss the implications of sensory evaluation in the development of a new food product.
17. Bring out the process of selecting and recruiting sensory evaluation panelists.
18. Explain the functions of packaging and package environment
19. Write short notes on retortable pouches used in food packaging
20. Explain the different types of Form Fill Seal (FFS) machine and their process.
21. Discuss the environmental implications of packaging materials used in food industry.
22. Bring out the importance of packaging aesthetics and graphic designing in the marketability of food product.

**Part C**

**Answer any four questions.**

**4 x 10 = 40 marks.**

23. Describe the key decisions throughout the stage gate process of product development.
24. What is Product Life Cycle (PLC)? What market strategies are used at each stage of PLC? How is PLC and adoption diffusion process is related?
25. Write short notes on a) Process flow sheet b) Process optimization
26. Discuss in details the use of various analytical tests used for sensory evaluation of foods.
27. Explain the principles and applications of modified atmosphere packaging.
28. Discuss the basics of canning operations in detail.

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