



LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

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

FIRST SEMESTER – APRIL 2018

16PFP1MC02- INTRODUCTION TO FOOD PROCESSING

Date: 02-05-2018
Time: 01:00-04:00

Dept. No.

Max. : 100 Marks

Part A

Answer ALL the questions.

10 x 2 = 20 marks

1. List the principles of food processing
2. Mention the various types of dispersions.
3. Name any four types of drying methods used in food processing.
4. Expand UHT and write two uses of UHT in dairy industry.
5. What are the different novel methods of processing used in food industry?
6. List any four enzymes used in food industry.
7. What do you understand from the term product life cycle?
8. Define scale-up.
9. What are the gases used in modified atmospheric packaging?
10. Which packaging is suitable for packing eggs? Why?

Part B

Answer ANY EIGHT questions.

8 x 5 = 40 marks

11. Highlight the significance of Arrhenius approach in the shelf life modeling of foods.
12. Discuss in brief the characteristics of various gels used in food industry.
13. Write short notes on retort packaging
14. What are the various high temperature and membrane processing methods involved in dairy industry?
15. Explain the various principles involved in irradiation of foods.
16. Bring out the role of beneficial microorganisms in food industry.
17. What is stage-gate process? How does it affect new product development?
18. How are food products authorized? Specify the steps involved.
19. Illustrate the stage of concept testing methodology and its impact of product designing.
20. Write the characteristics and merits of modified atmospheric packaging.
21. Highlight the criteria for selecting appropriate packaging for food products.
22. Write the importance of food labeling in consumer awareness.

Part C

Answer ANY FOUR questions.

4 x 10 =40 marks

23. Write a detailed note on various unit operations in food processing industry with their principles of operations and illustrate them by individual processes.
24. Discuss in detail the various methods of food preservation and processing by use of low temperature.
25. Explain the role of various enzymes in modern food technology; specify their mode of action and food application.
26. Bring the classes of new food products and their product life cycle in the market with suitable illustrations.
27. Describe the role of active packaging in determining the quality of the food product.
28. Highlight the environmental impact of food packaging waste and means of recycling and wise waste disposal.

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