



LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

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

SECOND SEMESTER – APRIL 2015

FP 2808 - FOOD PRESERVATION AND FOOD SAFETY

Date : 21/04/2015
Time : 01:00-04:00

Dept. No.

Max. : 100 Marks

Part A

Answer ALL the questions.

(10 x 2 =20 marks)

1. How do you delay self decomposition of foods?
2. Define quality plan and corrective action.
3. How do you determine F value with an end point thermal death curve?
4. Draw the drying curve.
5. Give the differences between ohmic heating and dielectric heating.
6. Name the preservative techniques used in the following products:
i) Yoghurt ii) evaporated milk iii) dates iv) mayonnaise.
7. Differentiate between risk assessment and risk management.
8. Expand i) SSOP ii) FSIS iii) GHP iv) NABL.
9. What management system are ISO 22000: 2005 and ISO 9001: 2008?
10. List the methods used for verification of a FSMS system.

Part B

Answer any EIGHT questions.

(8 x 5= 40 marks)

11. Draw the flow diagram of jam making and discuss the hurdle technology involved in the process.
12. Enumerate the functions of a Quality assurance and Quality control officer.
13. Explain i) document control in a food industry.
ii) reasons for a cleaning and sanitizing program in a food industry .
14. Briefly explain the chilling equipment used in the food industry.
15. Describe a batch retort system.
16. Write short notes on theory and mechanism of drying foods.
17. What are the advantages of dehydrated milk over fluid milk? Briefly describe the methods employed in the food industry for production of skimmed milk powder.
18. Elaborate on the principle and working of a HPP system.
19. Briefly explain curing of foods.
20. Discuss any five chemical hazards found in food and its preventive methods.
21. Write short notes on the structure of an ISO 22000:2005 standard document.
22. Explain the role of FSSAI in the food industry.

Part C

Answer any FOUR questions.

(4 x 10 = 40 marks)

23. Draft a raw material specification and explain.
24. Describe the effect of freezing on microorganisms in food.
25. Elaborate on radiofrequency heating of foods.
26. Adulterated food is impure, unsafe, or unwholesome food. Discuss.
27. Explain the significance of SOP and GMP in a food industry.
28. Discuss the steps of a HACCP system.
