LOYOLA COLLEGE (AUTONOMOUS), CHENNAI - 600 034

.Sc.DEGREE EXAMINATION - FOOD CHEMISTRY AND FOOD PROCESSING

SECONDSEMESTER - APRIL 2018

FP 2808- FOOD PRESERVATION AND FOOD SAFETY

Date: 23-04-2018 Dept. No. Max. : 100 Marks
Time: 01:00-04:00

Part A

Answer ALL the questions.

 $10 \times 2 = 20 \text{ marks}$

- 1. Give any four advantages of food preservation.
- 2. Write any four role of quality programme in hygiene.
- 3. Differentiate between mild and severe heat treatment.
- 4. List any four equipment used for food chilling operations.
- 5. Define hurdle technology.
- 6. What is radiofrequency drying?
- 7. List any eight common food allergens.
- 8. What are the advantages of microbiological reference criterion of foods?
- 9. Expand: FDA, FSMA, WHO, BIS.
- 10. Write any four functions of FSSAI as an organization.

Part B

Answer any EIGHT questions.

 $8 \times 5 = 40 \text{ marks}$

- 11. Enumerate the functions of a Quality control officer.
- 12. How do you draft a raw material specification?
- 13. With a suitable diagram explain the freezing curve.
- 14. Describe pasteurization for thermal processing of milk.
- 15. Elaborate on the important reactions and processes that are controlled in food during chilling.
- 16. Discuss the role of Pulse electric field technique in fruit juice processing.
- 17. Describe the changes in the properties of food during dehydration.
- 18. Comment on microwave technology and its safety aspects in food processing.
- 19. What is jewellery policy in a food industry?
- 20. Describe any ten pre requisite programmes.
- 21. Elaborate on the protocol for sampling of food by a FSSAI officer.
- 22. Define ISO 22000:2005 and discuss the role of Purchase in the food safety management system.

Part C

Answer any FOUR questions.

 $4 \times 10 = 40 \text{ marks}$

- 23. Discuss the principles of preservation that delay or prevent spoilage of foods.
- 24. With a suitable diagram explain the working of a vertical steam retort.
- 25. Discuss the principle involved in High pressure processing of foods. Mention various applications of HPP in food.
- 26. Elaborate on food adulteration
- 27. Describe the physical, chemical and biotechnology related food hazards.
- 28. Explain the five preliminary steps and the seven HACCP principles for developing a sound food safety management system.

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