TM153455B	Reg. No:
	Name:

# M. Sc. DEGREE (C.S.S.) EXAMINATION, MARCH 2017 (Supplementary – 2015 Admission) SEMESTER III - HOME SCIENCE (FOOD SCIENCE AND NUTRITION) FN3C13TM - FOOD MICROBIOLOGY AND QUALITY CONTROL

Time: Three Hours Maximum Marks: 75

## **PART A**

# I. Answer any five questions. Each question carries 3 marks.

- 1. What are the primary sources of microorganisms in food.
- 2. Give the classification of bacteria based on temperature.
- 3. What is ELISA?
- 4. Write about the microbial spoilage of fish.
- 5. What is botulism?
- 6. Give the principles of HACCP.
- 7. Explain about the different sources of food contamination.

(5x3=15)

#### PART B

## II. Answer any six questions. Each question carries 5 marks.

- 8. Explain about the economic importance of Bacteria.
- 9. Give the nutritional classification of microorganisms
- 10. What are the contaminants from plastics? Explain.
- 11. Explain about the spoilage of canned foods.
- 12. Write a note on cholera.
- 13. Explain about risk assessment.
- 14. Explain the role of FSSAI in ensuring food quality.
- 15. Explain about pesticide residue in foods and its impact on health.
- 16. Explain about the naturally occurring toxicants in foods.

(5x6=30)

## **PART C**

# III. Answer two questions. Each question carries 15 marks.

- 17. Elaborate on the factors that affect the growth of microorganisms in food.
- 18. Explain in detail about the traditional methods used for the detection and isolation of microorganisms.
- 19. Discuss about the microbial spoilage of milk and milk products
- 20. Write in detail about two food borne infections.

(2x15=30)