

TM153455A

Reg. No:.....

Name:.....

**M. Sc. DEGREE (C.S.S.) EXAMINATION, OCTOBER 2016**  
**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, not exceeding one page. Each question carries 3 marks**

1. Write a note on the normal flora of skin
2. Write a short note on water activity
3. What is MPN in enumeration of microorganisms?
4. Write about bread diseases
5. What is Lathyrism?
6. Explain about the functions of FSSAI
7. Write about aflatoxins

**(5x3=15)**

**PART B**

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

8. Write a note on the economic importance of yeast
9. Classify microorganisms based on their need of oxygen for growth
10. Bring out the impact of food contamination on health of individuals
11. Elaborate on the microbes that cause the spoilage of fruits and vegetables
12. Explain about the causes and symptoms of E.coli gastroenteritis
13. Give the need and principles of HACCP
14. Explain how the quality of food is maintained in India
15. Write on the hazards caused by dioxns and contaminants from plastics
16. Write a note on environmental contaminants

**(5x6=30)**

**PART C**

**III. Answer two questions not exceeding three pages. Each question carries 15 marks**

17. Discuss on two intrinsic and two extrinsic factors that affect the growth of microorganisms
18. Explain in detail about rapid detection methods of microorganisms
19. Elaborate on the spoilage of meat and meat products
20. Explain in detail about salmonellosis and botulism

**(2x15=30)**