



Register Number:

Date: 07-01-2021

**ST. JOSEPH'S COLLEGE (AUTONOMOUS), BENGALURU-27
M.Sc. FOOD SCIENCE AND TECHNOLOGY - I SEMESTER
SEMESTER EXAMINATION: JANUARY 2021
FST 1219 – FOOD MICROBIOLOGY**

Time- 2 1/2 hrs

Max Marks-70

This paper contains 2 printed pages and 04 parts

I. Answer any FIVE of the following

3×5=15

1. Write a note on DMC.
2. What is Redox Potential? How does it affect the growth of microorganisms in foods?
3. What is a_w ?
4. What is Putrefaction? List the types of foods spoiled by putrefaction.
5. Give the significance of irradiation of foods and add a note on applications of γ -irradiation in food preservation.
6. Write an account on Microbial Indicators of Water Quality.
7. List the Microbial criteria for foods?

II. Answer any FIVE of the following

5×5=25

8. Discuss the impact of Storage Temperature on the Growth of Microorganisms in foods.
9. What is Modified Atmospheric Packaging? Discuss its methodology and applications.
10. Discuss the types of Immunological Methods used for the Determination of Microorganisms in foods.
11. What are the conventional methods used for the Identification of microorganisms in foods? Discuss its advantages and disadvantages.
12. What is Food Spoilage? Write a note on Microbial Spoilage of Cereals and Pulses.
13. Write a note on Aflatoxins and Discuss the disease aetiology and prevention of Aflatoxicosis.
14. What is Hepatitis? Discuss the role of Hepatitis-A virus a food borne illness.

III. Answer any TWO of the following

10x2=20

15. Discuss in detail the types of Microorganisms present in natural foods.
16. Discuss in detail the various types of nucleic-acid based methods used for the determination of microorganisms in foods.
17. What is food infection? Discuss any two bacterial food borne diseases.

IV. Answer the following

10x1=10

18. The constituent of a dormant structure produced by a fungus is one of the highly exploited substance for the pharmaceutical industry. However, this organism causes severity of disorders ranging from burning sensations and hallucinations. Identify the fungus and write detailed notes on the disease cycle of the same.