

Register Number:

Date:17-04-2018(1PM)

**ST. JOSEPH’S COLLEGE (AUTONOMOUS), BANGALORE-27**

**B.Sc. MICROBIOLOGY - VI SEMESTER**

**SEMESTER EXAMINATION- APRIL 2018**

**MB 6116 – FOOD AND FERMENTATION TECHNOLOGY**

**Time- 2 1/2 hrs** **Max Marks-70**

**This paper contains 2 printed pages and 4 parts**

1. **Answer any Five of the following 5 x 3 = 15**
2. What is ultrafiltration? Mention its uses.
3. What is ropiness?
4. What are the functions of impellers?
5. How does liquid nitrogen work for preserving cultures?
6. What are aflatoxins?
7. List the different types of spargers and their uses.
8. Define aw and give its significance.
9. **Answer any Five of the following 5 x 5 = 25**
10. Define and discuss pasteurization.
11. Elaborate on the functions of :
12. Chelators b. Inducers c. Filter aids
13. Explain the structure and principle of an airlift fermenter.
14. Discuss the different methods used to dehydrate foods.
15. Explain the process of industrial production of butter.
16. Write detailed notes on SSF.
17. Discuss Staphylococcal food intoxication.
18. **Answer any Two of the following 2 x 10 = 20**
19. Discuss Botulism in detail.
20. Explain the types and application of chromatography in product recovery.
21. What are the functions of the following in food preservation:
22. Sulfur Dioxide b. Wood smoke
23. **Answer the following 1x 10 = 10**
24. a. While performing MBRT, what results would you expect if the milk sample used contains (i) strict aerobes only (ii) strict anaerobes only. Give reasons to justify your answer. **(5)**
25. Identify the technique depicted in the picture below. What do you interpret from the picture? Justify. **(1+4)**



NA

ZONE OF DIFFUSED GROWTH

4

3

2

1

COLONIES FROM SOIL

ZONE OF DIFFUSED GROWTH

MINIMAL MEDIA + TEST ORGANISM