Reg No:..... K25FY2224
Name :.....

Second Semester FYUGP Microbiology Examination APRIL 2025 (2024 Admission onwards) KU2MDCMBG102 (FERMENTED FOODS AND BEVERAGES)

(DATE OF EXAM: 26-4-2025)

Time : 90 min Maximum Marks : 50

Part A (Answer any 6 questions. Each carries 2 marks)

1. How do the products of alcoholic fermentation differ from those of lactic acid fermentation? 2

2. How does lactic acid contribute to sauerkraut preservation? What is the recommended salt concentration for sauerkraut fermentation? 2

3. What is the significance of whey in cheese-making? 2

4. Why are fermented vegetables beneficial for gut health? 2

5. Why are fermented vegetables considered functional foods? 2

6. What is sourdough fermentation? 2

7. Which type of microorganisms are typically considered probiotics? 2

8. How does fermentation differ in different regions? 2

Part B (Answer any 4 questions. Each carries 6 marks)

9. Analyze the historical development of fermented foods and beverages. How have cultural practices influenced the techniques used in fermentation throughout history? 6

10. Explain the fermentation process of sauerkraut in detail. 6

11. Discuss the importance of proper storage after fermentation. How does the presence of oxygen affect vegetable fermentation? 6

12. Explain the role of microorganisms in the fermentation of cereal-based products and fruits. How do they influence the final product? 6

13. Explain how the nutritional content of cabbage changes when it is fermented into sauerkraut. 6

14. Discuss the variety of regional fermented foods and beverages all around the world. Pick out common foods available at different regions. 6

Part C (Answer any 1 question(s). Each carries 14 marks)

15. Describe the differences between red, white, and sparkling wines based on their production processes and fermentation techniques 14

16. Provide an overview of the microbial fermentation process, including the types of microorganisms involved. How do these microorganisms transform raw materials into fermented products, and what are the key factors that influence the efficiency and outcome of the fermentation process? 14