

2056
B. Voc. (Food Processing and Preservation) FYUP
Fourth Semester
BFP 402: Food Microbiology

Time allowed: 3 Hours

Max. Marks: 40

NOTE: Attempt five questions in all, including Question No. I which is compulsory and selecting one question from each Unit.

x-x-x

I. Answer any four of the following:-

- Differentiate between bacteria and yeast based on their key characteristics in food.
- What are chemical agents? Give two examples used in microbial control.
- What is a fermenter? Name any two parts and their functions.
- What are probiotics and prebiotics? Give one example of each.
- Name any two microorganisms involved in spoilage of milk and meat products.
- What are indicators of microbial food spoilage? Give any two examples. (4x2)

UNIT - I

- Describe bacteria, yeasts, and moulds found in food. Compare their main features and roles. (8)
- What is normal microbiological quality of food? Explain its importance in food safety and shelf life. (8)

UNIT - II

- Explain principles of sterilization and pasteurization. Discuss various methods, and their importance in controlling microorganisms in food. (8)
- Discuss the role of chemical agents in controlling microorganisms. Explain different types with suitable examples. (8)

UNIT - III

- Describe the basic structure of a fermenter. Explain the main parts and their functions. (8)
- Discuss fermented foods and their benefits. Explain examples from vegetables, dairy, meat, poultry, fish, cocoa, coffee, wine, and beer. (8)

P.T.O.



(2)

UNIT - IV

- VIII. Explain the factors responsible for microbial food spoilage. Discuss intrinsic and extrinsic factors with examples. (8)
- IX. Discuss spoilage microorganisms in different food products. Explain spoilage bacteria in raw and pasteurized foods, canned foods, fruit juices, soft drinks, and refrigerated foods. (8)

x-x-x