

# School of Biological and Life sciences

Department of Biological and Life Sciences

Mid Term Examination

Exam Date: 29 Sep 2023

Time : 90 Minutes

Marks : 50

## Sem III - MSMB6005 - Food and Agricultural Microbiology

*Your answer should be specific to the question asked*

*Draw neat labeled diagrams wherever necessary*

- 1) Illustrate the principle and utility of Methylene Blue Reduction Test in detection of milk quality. K2 (2)
- 2) Show the usage of drying in food preservation. K1 (3)
- 3) Identify the significance of 12-D concept and water activity ( $a_w$ ). K2 (4)
- 4) How are chemicals utilized in food preservation? Discuss any two major groups of chemicals utilized for food preservation. K2 (6)
- 5) Outline the key mechanism of food preservation by low temperature and the various methods employed. K3 (6)
- 6) Identify the key methods of preservation of food and mechanism of pathogen killing. K3 (9)
- 7) Analyze in detail the principle of preservation by pasteurization and its types. K4 (8)
- 8) Examine the role of microbes in production of: K4 (12)
  - a) Cultured butter milk
  - b) Blue cheese
  - c) Acidophilus milk

**OR**

- Assess the contrasting features of: K4 (12)
- a) Hard cheese and soft cheese
  - b) Camembert cheese and blue cheese