

RAJARATA UNIVERSITY OF SRI LANKA FACULTY OF APPLIED SCIENCES

Bachelor of Science in Applied Sciences Third Year – Semester I Examination –July/August 2023

MIB 3204 - FOOD MICROBIOLOGY

Time:	Two	(02)	hours
-------	-----	------	-------

Answer FOUR (4) questions.

- 1. Evaluate the crucial role of microbial cultures in the development of desired characteristics in cheese during the production process. (100 marks)
- 2. a) Explain briefly the main factors contributing to the spoilage of dairy products.

(30 marks)

- b) Discuss briefly the ways of preventing or delaying the spoilage of dairy foods through proper storage and handling. (30 marks)
- c) Discuss the concept of the hurdle effect in food preservation.

(40 marks)

- 3. a) Discuss <u>five (5)</u> examples of bacterial foodborne diseases, outlining their causative agents, common sources of contamination, and symptoms. (60 marks)
 - b) Briefly explain the preventative measures that can be taken to control these diseases at both the individual and community levels. (40 marks)
- 4. Considering the environment of the human gastrointestinal tract, comment on the selection of probiotics capable of functioning effectively in the human gut. (100 marks)
- 5. a) Describe the intrinsic parameters of food, which affects microbial food safety.

 (50 marks)
 - b) Discuss the benefits of household mushroom production and consumption for alleviating protein deficiency in resource poor people in Sri Lanka. (50 marks)