



**RAJARATA UNIVERSITY OF SRI LANKA
FACULTY OF APPLIED SCIENCES**

**B.Sc. (General) Degree in Applied Biology
Third Year - Semester I Examination – November/December 2016**

BOT 3202- FOOD MICROBIOLOGY

Time: Two (2) hours

Answer four (4) questions only

1. The cheese microbiota, whose community structure evolves through a succession of different microbial groups, plays a central role in cheese-making. Evaluate the role of microorganisms in the development of desired characteristics in cheese during the commercial production.

2. Probiotics have been defined as “living micro-organisms, which upon ingestion in certain numbers, exert health affects beyond inherent basic nutrition.” Given that the human gastrointestinal tract is a complex and hostile environment, asses the criteria of selecting probiotic bacteria capable of performing effectively in the gastrointestinal tract.

3. Bacterial food-borne pathogens have been the most well investigated causes of intestinal infectious diseases. Therefore, these diseases command the majority of public health interest. Giving appropriate examples discuss bacterial food-borne diseases.

4. a) Explain what is meant by microbial food spoilage.
 b) What metabolic activities of microbes may lead to food spoilage?
 c) Describe the intrinsic parameters of food which affects microbial food spoilage.

5. a) Describe the commercial production processes of beer indicating the role of microorganisms where applicable.
 b) Write an account on the use of microbes as a source of food for humans and animals.

END