

**THE NATIONAL UNIVERSITY OF LESOTHO**  
**FACULTY OF HEALTH SCIENCE**  
**FOOD SAFETY AND HYGIENE – NUT3316**

**Supplementary Exams      Total marks: (100)      Time: 3 hours**

**Instructions:**

- Attempt all three (3) questions.
- Write each question on a separate page.

### **Question 1**

- i. Your class study group is tasked with the development of Standard Operating Procedure (SOP) for Sebatso Yoghurt in the department of Agriculture. List the steps necessary for the implementation of the SOP. (10)
- ii. Good quality raw materials, proper temperature storage and good cleaning and sanitation are key elements in ensuring a low microbial load. Describe the concept of microbial load and how it can be influenced? (10)
- iii. Explain ISO 22000:2018 and describe its scope in the food industry? (10)
- iv. Explain and describe Biofilms and their formation in the food industry? (10)

### **Question 2**

- i. In 2011, Viet Nam adopted a revised food safety law which specifically mentioned street food for the very first time, Success stories, WHO. How has the revised food safety law impacted street food in Viet Nam? (10)
- ii. Most important aspect of HACCP is that it is preventative system rather than an inspection system of controlling food safety hazards. Describe the principles of HACCP in details? (15)
- iii. Describe the Quality Management Cycle (QMC) in details? (15)

### **Question 3**

Overuse and misuse of antimicrobial medicines are among major factors that have contributed to the development of drug-resistant microbes.

- i. Define Antimicrobial Resistance (AMR)? (2)
- ii. Explain the five (5) objectives of the Global Action Plan on AMR? (8)
- iii. Antibiotic resistance developed by excessive use of antibiotics in animals can be passed into humans through food or the environment or vice versa. Explain? (10)