



**NATIONAL OPEN UNIVERSITY OF NIGERIA**  
**Faculty of Agricultural Sciences, Kaduna**  
**DEPARTMENT OF AGRICULTURAL ECONOMICS AND EXTENSION**  
**2020\_2 EXAMINATION**

**COURSE CODE: HCM431**

**COURSE TITLE: ADVANCE FOOD AND BEVERAGE PRODUCTION**

**COURSE UNIT: 2**

**INSTRUCTION: ANSWER QUESTION ONE AND ANY OTHER THREE**

**TIME ALLOWED: 2HRS**

1. You have been working as a Food and beverage manager in a large food service establishment for some time when you notice deterioration and a dramatic increase in food spoilage leading to decrease in kitchen profit.

A. What do you think is responsible for these? (4mks)

B. Provide a brief on what could be involved in the following:

(i) Knowledge of food microbiology. (4mks)

(ii) Microorganism in food. (4mks)

(iii) Grouping of food for test. (5mks)

(iv) Perishable foods. (3mks)

(v) Fermentation and foods. (5 mks)

**Total (25mks)**

2. A. Define Microbiology. (4mks)

B. With the aid of diagram, describe the morphological characteristics of Amoeba, Algae and Bacteria. (11mks)

**(Total = 15 Mks)**

3 A. As a Hotel and Catering professional, give a detailed explanation of food contamination and state its effect on food and beverage production. (7mks)

B. Identify the causes of contamination and state some of the ways of avoiding it for maximum efficiency.

**(Total = 15 Mks)**

4 A. Describe the spoilage of the following food commodities and their indications. (8mks)

B. Explain the causes of the spoilage and suggest ways to prevent it from occurring in your hotel. (4mks)

C. Discuss at least five factors influencing microbial growth. (3mks)

**(Total = 15 Mks)**

5. A What do you understand by food preservation? (3mks)
- B. Explain the processes designed to preserve food. (8mks)
- C. Identify the reasons for preserving food. (4mks)

**(Total = 15 Mks)**

6. A. Food additives play key role in maintaining the food qualities and characteristics that consumers demand. Discuss. (9mks)
- B. Mention the primary reasons for adding colours to foods (3mks)
- C. Which of the food additives cause adverse reactions.? (3mks)

**(Total = 15 Mks)**