**FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA**
**DEPARTMENT OF MICROBIOLOGY**
**FIRST SEMESTER EXAMINATION, 2018/2019 SESSION**
**FOOD MICROBIOLOGY (MCB 412), 3 UNITS**

**INSTRUCTIONS:** Answer any **FIVE Questions**.
**Time Allowed: 2Hours**

1. Discuss various microbial spoilage associated with eggs.
2. Give a description of suitable techniques for detecting microbial presence in the following food products: fruits and vegetables, evaporated milk and raw meat.

3a. Explain how the following factors affect microbial activities in food;

- Water activity
- Antimicrobial constituents
- Biological Structure

3b. What is DNA probe? Why is it significant in microbial food analysis?

4a. Discuss vividly the biological method of food preservation.

4b. In a tabular form, list five (5) bacterial agents of food borne diseases indicating the important reservoirs, transmission and examples of incriminated food.

5a. Enumerate the differences between Brucellosis and Salmonellosis.

5b. List and explain with examples the different types of food borne diseases.

6. Describe the procedures involved in the production of any 2 of the following dairy products;

- Yogurt
- Ice cream
- Cheese

7a. Differentiate between Fumonisin and Aflatoxin.

7b. Describe how the following methods are used in microbial food analysis:

- Measurement of electrical impedance
- Membrane filter technique.