



**FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA**  
**DEPARTMENT OF MICROBIOLOGY**  
**FIRST SEMESTER EXAMINATION**  
**2018/2019 SESSION**

**Course Title: Principles of Disinfection & Sterilization**

**Course Code : MCB 312**

**Time allowed: 1½ Hours**

**Instruction: Answer 3 questions in all. Attempt one question only in section A.**

**Section A (Attempt 1 question only in this section)**

- 1(a). Define microbial growth.
- 1(b). Outline methods used to measure microbial growth.
- 2(a). Describe (i) disinfection (ii) sterilization (iii) disinfectants (iv) antiseptics
- 2(b). Explain methods of (i) pasteurization (ii) Tyndallization.

**Section B (Attempt 2 questions in this section)**

1. Write short notes on the following with emphasis on their mechanism of action.
  - (i) Alkylating agent (ii) Plant Alkaloids (iii) Antimetabolites (iv) Antitumor Antibiotics
2. Viruses were discovered in a liquid medium. As a microbiologist, explain how you would handle the virus to ensure safety of your product.
- 3(a). Define drug resistance and mention three ways in which micro organisms acquire resistance.
- 3(b). Mention five major steps in the kirby-bauer disc diffusion method of determining microbial susceptibility
- 3(c). What is minimum inhibitory concentration? How can it be determined?