FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA
SCHOOL OF LIFE SCIENCES
DEPARTMENT OF MICROBIOLOGY

FIRST SEMESTER EXAMINATION 2015/2016 SESSION

COURSE CODE: MCB 312
COURSE TITLE: PRINCIPLE OF STERILIZATION AND DISINFECTION (3 UNITS)
CLASS: 300 LEVEL
TIME: 2 HOURS

Instruction: Answer only two (2) questions in each section

Section A

1(a). Write short notes on the following antimicrobial agents:
- (i) Alcohol
- (ii) Formaldehyde
- (iii) Phenolics

1(b). Explain how you will determine the efficiency of an autoclave.

2. Describe the mechanism of action of the following disinfectants:
- (i) Chlorine and chlorine compounds
- (ii) Glutaraldehyde
- (iii) Iodine
- (iv) Quaternary ammonium compounds
- (v) Hydrogen peroxide

3(a). Describe the two forms of radiation that could be used for sterilization or disinfection

3(b). What are the common food items that irradiation can be applied to as a form of sterilization or disinfection?

Section B
Answer question **FOUR** and any other one in this section

4(a). Differentiate between antibiotic resistance and antimicrobial resistance

4(b). Why is it necessary to perform antimicrobial susceptibility test on pathogenic isolates ?

4(c). Antimicrobial resistance increases the cost of health care. Discuss

5(a). Minimum inhibitory concentration (MIC) test can be performed on sterile body fluid without isolating and identifying the pathogenic microorganisms. Explain

5(b). Define Chemotherapy. Outline and explain the various side effects associated with chemotherapy.

6(a). How will you classify chemotherapy?

6(b). Explain the use of chemotherapy for ailments other than for cancer treatment.