



FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA
DEPARTMENT OF MICROBIOLOGY
SECOND SEMESTER, 2022/2023 SESSION
EXAMINATION QUESTIONS

Course Title: Pharmaceutical Microbiology (2 Units)

Course Code: MCB 525

Time: 1 hour 30 minutes

Instruction: Answer **THREE (3)** questions in all. Attempt **one (1)** question only in each section

SECTION A

- 1(a). Enumerate common preservatives useful in prolonging shelf lives of foods
- 1(b). Discuss antimicrobial agents used in treatment of infectious diseases and their distinctive properties
- 1(c). Outline certain terminologies commonly used in pharmaceutical microbiology
- 2(a). Make large well labelled diagrams of the chemical structures of representatives of beta-lactam antibiotics.
- 2(b). Describe spoilage and preservation of pharmaceutical products
- 2(c). Why are pharmaceutical products prone to microbial attacks?

SECTION B

- 1(a). Define Antibiotic Susceptibility testing
- 1(b). Mention two methods of dilution susceptibility testing
- 1(c). Succinctly explain the major mechanism of antibiotic resistance
- 4(a). What is Drug Discovery?
- 4(b). Discuss three medicinal plants stating their phytochemical content

SECTION C

5. Explain measurement of bacterial growth using direct method.
6. Highlight the action of quaternary ammonium compounds on Microorganisms?