



FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA
SCHOOL OF LIFE SCIENCES
DEPARTMENT OF MICROBIOLOGY
SECOND SEMESTER EXAMINATION, 2017/2018 SESSION

COURSE CODE: MCB 324

COURSE TITLE: Microbiological Techniques

INSTRUCTION: Answer 5 questions in all. Attempt at least one question in each section

TIME: 2^{1/2}HOURS

SECTION A

- 1(a). Make a well labeled diagram of a bacterial cell.
- 1(b). Describe the following structures and their functions:
 - i. flagella
 - ii. fimbriae
 - iii. pili
- 2(a). Briefly discuss vitamins and suppliments
- 2(b). List the B vitamins and their common names
- 3(a). Discuss serology
- 3(b). What are the uses of serological surveys?

SECTION B

- 4(a). List and explain the factors affecting the growth of bacteria
- 4(b). Discuss the basic nutrients required by bacteria for growth.
5. Classify any three (3) bacteria taxonomically from kingdom to specie.

SECTION C

6. List and discuss any six cultural characteristics used to identify a bacterial colony.
- 7(a). As a microbiology student, highlight the importance of culture media, general purpose media, semi solid media and biochemical tests in a microbiology laboratory.
- 7(b). Briefly outline any five arrangements of bacterial cells.