



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

FIRST SEMESTER EXAMINATION 2015/2016 SESSION

COURSE CODE: MCB 511

COURSE TITLE: PATHOGENIC BACTERIOLOGY (3 UNITS)

CLASS: 500 LEVEL

TIME: 2 HOURS

Instruction: Answer 2 questions in each section

SECTION A

1. Under our laboratory conditions how will you adequately distinguish *Escherichia coli* from *Klebsiella pneumoniae* and *Salmonella typhi* from *Shigella dysenteriae*?
2. Describe the life cycle of Chlamydia and Chlamydial diseases.
3. Write short notes on the following:
 - (i) Milk ring test
 - (ii) *Yersinia* sp
 - (iii) *Helicobacter pylori*
 - (iv) VDRL Test

SECTION B

- 4(a). Compare and contrast between Endotoxins and Exotoxins, giving examples of bacteria that produce each.
- 4(b). You are given a culture of *Staphylococcus aureus*, describe the steps you will use to identify the organism.
5. Discuss bacterial virulence and its role in bacterial pathogenesis
6. Explain the following terms
 - (i) Normal microbiota
 - (ii) Taxonomy
 - (iii) Bacterial structure
 - (iv) Haemolysis