



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

**FIRST SEMESTER EXAMINATION 2014/2015 SESSION**

**COURSE CODE: MCB511 (3 CREDITS)**  
**COURSE TITLE: PATHOGENIC MICROBIOLOGY**  
**CLASS: 500 LEVEL**  
**TIME ALLOWED: 2hrs. 30min**

**INSTRUCTION:** Attempt any **five** questions

1(a). List the members of the family Enterobacteriaceae

1(b). Complete the following Table for the bacteria listed below:

Name of bacteria	Lactose fermentation	Urease production	H <sub>2</sub> S production	Gas from glucose formation
<i>Escherichia coli</i>				
<i>Salmonella typhi</i>				
<i>Proteus vulgaris</i>				
<i>Klebsiella pneumoniae</i>				
<i>Shigella dysenteriae</i>				

- 1(c). How can you differentiate *Pseudomonas aeruginosa* and *Vibrio cholerae* from the enteric bacteria
2. Describe the *Chlamydiae* and the diseases they cause in man.
3. Discuss bacterial zoonosis.
4. Write short notes on any three of the following;
- i. VDRL Test
  - ii. *Yersinia pestis*
  - iii. *Helicobacter pylori*
  - iv. *Brucella abortus*

5. List the microbial flora of the different body regions and explain the factors that determine their distribution.
6. Discuss bacterial pathogenesis.
7. Describe diseases caused by *Staphylococcus aureus* and give the underlying mechanism.