CRAWFORD UNIVERSITY

FAITH CITY, IGBESA, OGUN STATE

2016/2017 RAIN SEMESTER EXAMINATIONS
COLLEGE: NATURAL AND APPLIED SCIENCES
DEPARTMENT: BIOLOGICAL SCIENCES
PROGRAMME: MICROBIOLOGY
COURSE CODE: MCB 309
COURSE TITLE: BACTERIAL DIVERSITY
COURSE UNIT: 3 **TIME ALLOWED: 3 HOURS**

INSTRUCTION: ANSWER QUESTIONS ONE (1) AND TWO (2) WITH ANY OTHER THREE (3).

1. Discuss in details the Phenotypic and Genotypic analyses for bacterial classification. 15 marks

2a. Of what importance is the Genus *Streptomyces* to man?
b. How can you isolate species of Streptomyces from the environment?
c. Draw out the similarities existing between Streptomyces and Fungi. 15 marks

3a. Enteric Bacteria can be classified into two physiologic groups based on their fermentation patterns. Explain.
b. Explain the swarming growth of the *Proteus* sp. 10 marks.

4a. What do you understand by bacterial bioluminescence? Discuss in details the group of bacteria involved and the importance. 10 marks.

5a. Write concisely on the *Chlamydias* and *Rickettsias.* 10 marks.

6. *Treponema pallidum* and *Borrelia recurrentis* are species of Spirochetes of great health importance to man. Discuss. 10 marks.

7a. Discuss the uniqueness of genus *Mycobacterium* with specific reference to *M. tuberculosis.*
b. How would you test for *M. tuberculosis* infection/exposure in an individual? 10 marks