



# CRAWFORD UNIVERSITY

FAITH CITY, IGBESA, OGUN STATE

2021/2022 HARMATTAN SEMESTER EXAMINATIONS

COLLEGE: NATURAL AND APPLIED SCIENCES

DEPARTMENT: BIOLOGICAL SCIENCES

PROGRAMME: MICROBIOLOGY

COURSE CODE: MCB 307

COURSE TITLE: IMMUNOLOGY

COURSE UNIT: 3

ALLOWED: 3 HOURS

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

1. With the aid of the different components, fully discuss the Innate Immunity. 15 marks
- 2a. The interaction between antigens and specific antibodies may lead to pathogen destruction by MAC. What is the phenomenon called and how is it achieved?
- b. In what other ways could this phenomenon be achieved?
- c. What is the fate of both Gram-positive and Gram-negative bacteria? 15 marks
3. Discuss the major histocompatibility complex (MHC) proteins and how they function in antigen presentation to T cells. 10 marks
- 4a. What properties qualify an antigen as being immunogenic?
- b. Trace the origin of the cells of the immune system. 10 marks
5. What are antibodies and how do they differ in structure, function and mode of secretion? 10 marks
- 6a. Explain the rationale for periodic immunizations.
- b. Identify the characteristics of adaptive immune response. 10 marks
7. The immune system is meant to protect the individual but there are times it adversely affect the host's health by causing a number of diseases. Name and explain this situation in details. 10 marks