



EDO UNIVERSITY, IYAMHO, EDO STATE
FACULTY OF SCIENCE
DEPARTMENT OF MICROBIOLOGY



2017/2018 FIRST SEMESTER EXAMINATION

COURSE CODE: MCB 316. **COURSE TITLE:** Immunology. **CREDIT UNIT:** 3.

INSTRUCTIONS: (1.) Answer **two** questions from each section (four questions in all).

(2.) Do not borrow any material from fellow students during examination.

DURATION: 2 hrs 15mins.

DATE: 4th May, 2018

SECTION A

- 1.) Write on live-attenuated and inactivated vaccines. **(17.5 marks)**
- 2.) (a) Write on the antimicrobial functions of complement system. **(12 marks)**
(b) Of what benefits are vaccines to man? **(5.5 marks)**
- 3.) Mention ten types of skin grafting and compulsorily write on the TWO major ones.
(17.5 marks)

SECTION B

- (4.) (a) Briefly discuss immunoglobulin G. **(5 marks)**
(b) Outline the series of events by which acute inflammation neutralizes and eliminates a pathogen. **(4 marks)**
(c) With a well labeled diagram, illustrate an immunoglobulin molecule. **(4.5 marks)**
(d) Outline the characteristics that differentiate adaptive immunity from innate immunity.
(4 marks)
- (5.) (a) Discuss the *skin* as a very effective mechanical barrier to microbial invasion. **(7 marks)**
(b) Define the following: (i) Opsonization, (ii) Anergy, (iii) Phagocytosis, (iv) Monocytes, (v) Phagolysosome, (vi) Immunological tolerance, (vii) Cytokines, (viii) Effector response. **(8 marks)**
(c) What are the cardinal signs of inflammation? **(2.5 marks)**
- (6.) (a) Briefly discuss the forms of recognition in opsonin-independent interactions found in phagocytic cells. **(4 marks)**
(b) Discuss the general properties of antigens. **(9.5 marks)**
(c) What are the major roles of T helper cells? **(4 marks)**

GOOD LUCK!