

EDO UNIVERSITY IYAMHO
COLLEGE OF MEDICAL SCIENCES
FACULTY OF BASIC MEDICAL SCIENCES

DEPARTMENT OF BIOCHEMISTRY  **2ND SEMESTER EXAMINATION**
(2017/2018) ACADEMIC SESSION

COURSE TITLE: BASIC IMMUNOLOGY

COURSE CODE: BCH 224 TIME: 2.5HOURS CREDIT UNIT: 2

INSTRUCTIONS: ANSWER ANY FIVE (5) QUESTIONS

- 1a). With relevant examples, discuss the following
 - (i) Acquisition of immunity
 - (ii) Superantigens
- 1b). A two year old girl was infested with malaria parasite for the first time in her life. It took her many days to recover from the illness. However, few months later, she became ill with malaria again but this time around, she got well earlier than the first episode. Briefly discuss the immune responses interplay in this girl.
- 2a). List the five classes of immunoglobulin
- 2b). Briefly discuss the function of an immunoglobulin class with a molecular weight of 150kD
- 2c). Succinctly describe the proteolytic products of immunoglobulin digestion by papain and Pepsin
- 3a). Discuss four determinants of antigenicity
- 3b). Describe the stepwise laboratory process of monoclonal antibody production
- 3c). List five uses of monoclonal antibodies
- 4). Write briefly on the following: (i) Mononuclear phagocytic cells (ii) Granulocyte cell populations (iii) Type 1 hypersensitivity (iv) Type II Hypersensitivity (v) Type IV Hypersensitivity
- 5a). Define the following: (i) Complement system (ii) Hypersensitivity (iii) Major Histocompatibility complex (MHC) proteins (iv) Transplantation (v) Autoimmunity
- 5b). Write briefly on the ABO Blood group system
- 6a). Write briefly on the four major antimicrobial functions of Complement system
- 6b). How can complement proteins be regulated?
- 6c). How can MHC proteins be regulated?
- 7). Describe and differentiate the classes/sub-classes of Major Histocompatibility complex