



NATIONAL OPEN UNIVERSITY OF NIGERIA
UNIVERSITY VILLAGE, PLOT 91 CADASTRAL ZONE, NNAMDI AZIKIWE
EXPRESS WAY, JABI - ABUJA.
FACULTY OF SCIENCE
2017_2 Examinations

BIO 318: Immunology and Immunochemistry III(3 Credit Units)

TIME: 2½ Hours

INSTRUCTION: Answer five questions in all .Question 1 is compulsory

- 1a List 4 purposes for drug bioassay (4marks)
 - b. Explain the four distinct phases in the cell cycle division process.(4marks)
 - c Describe four new techniques used in immunochemistry (6marks)
 - d.State the postulates of the clonal selection hypothesis (4marks)
 - e. List four cellular components and four secreted components of the innate immune system (4marks)
-
- 2a. List four techniques involved in the determination of bioassays methods (2marks)
 - b .Enumerate 10 criteria that should be met by a primary bioassay (10marks)
-
3. Write a brief history of chemotherapy (12marks)
-
4. Explicate the activities of the following immunosuppressive agents utilized in transplant rejection.(12 marks)
 - a. CalcineurinBlockers (Ciclosporin and Tacrolimus)
 - b. AntiproliferativeAgents (Azathioprine and MycophenolateMofetil)
 - c. Corticosteroids
 - d. m-TOR Inhibitors (Sirolimus and Everolimus)
-
5. Describe the events that occur in the body during a primary exposure to an antigen.
(marks will be awarded for a clearillustration)(12 marks)
-
- 6.Explain six properties of the adaptive immune response.(12 marks)