



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)