



FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA
DEPARTMENT OF MICROBIOLOGY
FIRST SEMESTER EXAMINATION, 2017/2018 SESSION
IMMUNOLOGY AND IMMUNOCHEMISTRY (MCB 411) 3 UNITS

INSTRUCTIONS: Answer any **FIVE Questions**.

Time: 2Hours

1. Explain the following terms with relevant examples:
 - (i) Natural passive immunity
 - (ii) Artificial active immunity
 - (iii) Hapten
 - (iv) Herd immunity
2.
 - (a) Discuss in details primary and secondary immune responses to infection
 - (b) Enumerate the merits derived from secondary immune response
3.
 - (a) Explain the three pathways of complement activation
 - (b) Enumerate the similarities and differences associated with the three pathways
4. Write an essay on antigens
5. How can you regulate the effect of complement in immunological response?
6. Mr Shabaze has been diagnosed of inability to produce antibodies to fight an infection. What are the steps to be taken to effectively manage the situation? Assuming, no antibiotic is available
7. Explain with specific examples, how immunoglobulins can activate complement via the classic pathway.