

NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY

FACULTY OF MEDICINE

BACHELOR OF MEDICINE AND BACHELOR OF SURGERY DEGREE
PART 2 EXAMINATIONS

MBM 2201 : HAEMATOLOGY AND IMMUNOLOGY

DATE : DECEMBER 2006

TIME : 3 HOURS

Instructions to Candidates

Answer all questions

SECTION A

1. Outline the complement cascade and explain the role that it plays in immunological defences. (20)
2. With the aid of a diagram illustrate the successive steps in the differential diagnosis of anaemias. (20)

SECTION B

3. For each of the following cell types describe briefly, their roles in the immune response:
 - a) T_{helper} (4)
 - b) T_{cytotoxic} (4)
 - c) memory cells. (4)
4. Differentiate between the following terms:
 - (a) antigen and epitope (3)
 - (b) antibody-antigen affinity and avidity (3)
 - (c) allergy and anaphylaxis (3)
 - (d) cytolytic T cells and natural killer cells. (3)

5. Draw a diagram to display the primary and secondary immune responses and identify the immunoglobulin class(es) involved. (6)
6. Give an overview of the clinical manifestations of haemophilia A. (2)
7. What therapeutic measures do you implement to manage Von Willebrand's disease? (2)
8. Write on the pathogenesis of disseminated intra-vascular coagulation and the expected results of the laboratory tests performed. (4)
9. Briefly, outline the differential diagnosis for chronic myeloid leukaemia and leukaemoid reactions. (6)
10. Discuss, briefly, the effects of hormones on erythropoiesis. (3)
11. What are the normal ranges of the concentration of haemoglobin in infants, in men, and in women of child bearing age? (3)
12. Explain how the neutrophil carries about the process of phagocytosis. (4)
13. Give three examples of platelet aggregating agents and briefly explain their functions. (6)

END OF EXAMINATION