

NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY

FACULTY OF MEDICINE

BACHELOR OF MEDICINE AND BACHELOR OF SURGERY DEGREE
PART 2 EXAMINATIONS

MBM 2202 : MICROBIAL PATHOLOGY

DATE : DECEMBER 2006

TIME : 3 HOURS

Instructions to Candidates

Answer all questions

SECTION A

1. Write an essay on opportunistic infections that affect the respiratory tract, the gastro-intestinal tract and the skin in AIDS patients. (20)
 2. Write an essay on immunisable diseases for children in Zimbabwe focusing on the immunisation programme. For each of the diseases highlight the aetiology, organ systems affected and the main clinical manifestations. (20)
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SECTION B

3. a) Briefly explain the five(5) broad types of bacterial resistance mechanisms to antibacterial drugs. (5)
- b) Define the following terms:
 - (i) drug cross resistance (1)
 - (ii) multiple drug resistance (1)
 - (iii) multi-drug resistant tuberculosis (MDR-TB) (1)
 - (iv) extremely drug resistant tuberculosis(XDR-TB). (1)
4. Name any five (5)sexually transmitted diseases that are characterised by genital ulcers. For each disease give one causative agent. (5)

5. Explain the physical defenses of the respiratory tract against invading micro-organisms and particles. (5)
6. The cornerstone in the diagnosis of meningitis is the examination of cerebrospinal fluid. Describe the laboratory tests done on the cerebrospinal fluid when acute bacterial meningitis is suspected and highlight the key features of expected laboratory results. (10)
7. a) (i) Describe the haematological changes in malaria. (4)
 (ii) What is the mechanism of action of chloroquine and what are the possible mechanisms of resistance to it. (5)
8. Briefly explain the clinical course of human African trypanosomiasis (sleeping sickness). (6)
9. Describe the three stages in the manifestation of the symptoms of schistosomiasis. (8)
10. Explain viral antigenic shift and its relevance to avian influenza. (8)

END OF EXAMINATION