

**NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY**

**FACULTY OF MEDICINE**

**BACHELOR OF MEDICINE AND BACHELOR OF SURGERY DEGREE**

**PART 1 EXAMINATIONS**

**MBM 1203 : MICROBES, VIRUSES AND PARASITES**

**DATE : MAY 2006**

**TIME : 3 HOURS**

**Instructions to Candidates**

**Answer all questions**

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**SECTION A**

1. Write an essay on the laboratory techniques used in the identification of viruses from clinical specimens. (20)
2. Describe the lifecycle of the flagellate protozoan which causes African trypanosomiasis and include the important features of the disease. (20)

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**SECTION B**

3. Explain the concepts of viral antigenic drift and antigenic shift in the context of influenza vaccine efforts as well as the emergence of human avian flu. (10)
4. Describe the effects of viral replication on infected cells. (10)

5. Complete the following table giving any one mode of transmission in each case:

<u>Virus</u>	<u>Disease</u>	<u>Mode of Transmission</u>
Hepatitis B		
Polio virus		
Rhinovirus		
Cytomegalo virus		
Varicella –zoster		
Herpes simplex 2		
Ebola virus		
Measles virus		
Influenza A		
SARS-CoV		
Papilloma virus		
Epstein-Barr virus		

(12)

6. Describe the lifecycle and transmission of any **two** parasites that cause severe diarrhea in AIDS patients. (18)

7. Complete the table below :

<u>Specimen</u>	<u>Possible parasite</u>	<u>Disease caused</u>	<u>Typical laboratory diagnostic feature</u>
Urine			
Stool			
Sputum			
Blood			
Tissue biopsy			

(10)

**END OF EXAMINATION**