

NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY**FACULTY OF MEDICINE****BACHELOR OF MEDICINE AND BACHELOR OF SURGERY DEGREE**
PART 1 EXAMINATIONS (SUPP)**MBM 1203** : MICROBES, VIRUSES AND PARASITES**DATE** : **JULY 2006****TIME** : **3 HOURS****Instructions to Candidates****Answer all questions**

SECTION A

1. Describe the various components of a viral particle (virion) and explain how the virion structure affects viral properties. (20)
 2. Describe the lifecycle and disease caused by *Toxoplasma gondii*. (20)
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SECTION B

3. a) For the following modes of transmission, give an example of a virus that is transmissible by each mode and the disease caused in each case.

Mode of transmission	Virus	Disease
Respiratory secretions		
Faecal-oral		
Mother to child		
Animal to human		
Sexual		
Blood transfusion		

(12)

4. a) How does the HIV virus affect the cells that it infects? (10)
- b) What are the clinically important antigens of the HIV virus? (3)
5. a) Name any four modes of transmission for the Hepatitis B virus. (4)
- b) What viral diseases are immunisable during childhood in Zimbabwe and what are their modes of transmission? (6)
- c) Name any one virus that causes genital ulcerations and any one that causes genital warts. (2)
- d) Explain the relationship between genital ulcers and HIV transmission. (4)
6. Using illustrated examples explain direct and indirect parasitic life cycles. (10)
7. Explain the laboratory diagnosis of the following parasitic diseases by stating the specimen required and relevant characteristics of the parasite:
 - a. malaria (3)
 - b. African trypanosomiasis (3)
 - c. schistosomiasis. (3)

END OF EXAMINATION