

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

EXAMINATION FOR THE AWARD OF DEGREE
OF BACHELOR OF BIOMEDICAL TECHNOLOGY

BMET 232: MEDICAL VIROLOGY

STREAMS: BMET

TIME: 2 HOURS

DAY/DATE: MONDAY 15/4/2019

2.30 P.M. – 4.30 P.M.

INSTRUCTIONS: Answer question ONE and any other TWO questions

QUESTION 1 (COMPULSORY) – 30 MARKS

- (a) Draw a well labeled diagram of a virion. [5 marks]
- (B) Draw five examples of DNA viruses [5 marks]
- (c) Outline five properties of viruses. [5 marks]
- (d) (i) Describe three requirements that must be satisfied to ensure successful viral infection in an individual host. [3 marks]
- (ii) Differentiate between virulent and attenuated virus. [2 marks]
- (e) Using specific examples, explain how viruses can spread through urogenital tract. [5 marks]
- (f) (i) List four viruses that are transmitted via respiratory route. [2 marks]
- (ii) List six viruses that are members of herpesviridae. [3 marks]

QUESTION 2 (20 MARKS)

- (a) Discuss viral replication cycle in detail. [10 marks]

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- (b) In detail, describe 3 basic categories of methods used in the initial diagnosis of virus infection. [10 marks]

QUESTION 3 (20 MARKS)

- (a) Describe mechanisms in genetic variation of RNA viruses. [10 marks]
(b) Describe Baltimore Classification of viruses. [10 marks]

QUESTION 4 (20 MARKS)

- (a) Giving appropriate examples draw five basic types of viral symmetry. [10 marks]
(b) Highlight the properties of naked and enveloped viruses. [10 marks]
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