



NATIONAL OPEN UNIVERSITY OF NIGERIA
Plot 91, Cadastral Zone, Nnamdi Azikiwe Expressway, Jabi - Abuja
Faculty of Science
JULY, 2017 EXAMINATION

COURSE CODE: BIO 415 (2 CREDIT UNITS)

COURSE TITLE: VIROLOGY AND TISSUE CULTURE

CREDIT: 2 units

TIME ALLOWED: 2 Hours

INSTRUCTION: ANSWER QUESTION ONE (1) AND ANY OTHER THREE (3) QUESTIONS

1. (a) Define the term virology (3 marks)
(b) Give a detailed description of the chemical composition of viruses (12 marks)
(c) With the help of a table, list 10 medically important viruses and infection caused by each of them. (10 marks)
2. (a) Enumerate the factors considered in classification of viruses. (7 marks)
(b) Write **short notes** on the following stages of viral replication:
 - i. Transcription (4 marks)
 - ii. Maturity and release (4 marks)
3. In a tabular form, list 10 medically important viruses, indicating their characteristic symmetry and shapes (15 marks)
4. (a) Outline **any 6** characteristics of viruses (6 marks)
(b) Give a detailed description of the various modes of infection transmission by viruses (9 marks)
5. The future prospects in vaccination is bright through the combination of Molecular Biology and modern Technologies. Discuss (15 marks)