



EDO UNIVERSITY, IYAMHO, EDO STATE

FACULTY OF SCIENCE

DEPARTMENT OF MICROBIOLOGY

First Semester Examination, 2017/18 Session

Course Title: Introductory Virology

Course Code: MCB 315

Time allowed: 2 Hours

Instruction: Answer **FOUR** questions

Date: 2nd May, 2018

### QUESTION ONE

- A). With a well labelled diagram, describe a typical viral particle.
- B). Differentiate between the lytic and lysogenic cycle of a virus using an illustrative diagram. [17.5 marks]

### QUESTION TWO

Describe extensively cultivation of viruses and their detection methods. [17.5 marks]

### QUESTION THREE

With the aid of an illustrative diagram, discuss the replicative process of the Human immunodeficiency virus. [17.5 marks]

### QUESTION FOUR

- A). As a virology student, classify the virus responsible for Lassa fever infection in details.
- B). Explain the reaction of a typical virus to different physical and chemical agents. [17.5 marks]

### QUESTION FIVE

- A). Discuss in details viral assay.
- B). The Epstein virus was cultivated using a conventional method and the following results were obtained:

Virus Dilution	No of culture inoculated	No of culture infected
$10^{-8}$	5	5
$10^{-10}$	5	3
$10^{-12}$	5	2
$10^{-14}$	5	1
$10^{-16}$	5	0

Using Reed Muruch (1938) formulae, calculate the viral concentration of an aliquot that was passage. [17.5 marks]