



**ELIZADE UNIVERSITY,
ILARA-MOKIN, NIGERIA**

FACULTY: BASIC & APPLIED SCIENCES

DEPARTMENT: BIOLOGICAL SCIENCES

FIRST SEMESTER EXAMINATION

2020/2021 ACADEMIC SESSION

COURSE CODE: MCB 303

COURSE TITLE: VIROLOGY

COURSE UNIT: 2 UNITS

DURATION: 2 HOURS



HOD's SIGNATURE

NAME:.....

MAT. No:.....

**INSTRUCTION: ANSWER THREE (3) QUESTIONS WITH ATLEAST ONE (1)
QUESTION FROM EACH SECTION.**

SECTION A

1. a.) Explain the four (4) possibilities of a virus genome
b) Explain any five (5) usefulness of viruses **20 Marks**
2. a.) Discuss any two criteria used to define a virus.
b) Briefly explain cytopathic effects and list any three (3) types of cytopathic effects. **20 Marks**
3. a.) Explain vertical transmission of viruses
b) With the aid of a diagram, explain the lytic and lysogenic life cycles of a bacteriophage. **20 Marks**

SECTION B

4. a. What is the difference between the following?
i. cytolytic and cytopathic virus ii. Antibodies and interferons
iii. Active and passive immunity iv. Second and third line of defense against viral attack
b. State the main mechanisms that viruses use to achieve systemic infection.
c. Mention three (3) factors that determine the survival of viruses outside living host. **20 Marks**
5. a. Draw a well-labelled typical structure of a virion and functions of the parts.
b. State the mode of transmission of the following group of viruses
i. Norovirus ii. Rotavirus iii. Enterovirus iv. Lentivirus v. Coronavirus
c. What is antiviral chemotherapy? **20 Marks**