



**NATIONAL OPEN UNIVERSITY OF NIGERIA**  
**National Open University Of Nigeria**  
**Plot 91, Cadastral Zone, NnamdiAzikiwe Expressway, Jabi - Abuja**  
**Faculty of Science**  
**Department of Pure and Applied Sciences**  
**JUNE/JULY 2021 EXAMINATION** 1234

**COURSE CODE: BIO 415**

**COURSE TITLE: VIROLOGY AND TISSUE CULTURE**

**CREDIT: 2 UNITS**

**INSTRUCTION: ANSWER QUESTION ONE AND ANY OTHER THREE QUESTIONS**

- 1a. What do you understand by envelope in viruses? (5marks)
- 1b. List the genera in the sub-family of chordopox virinae (8marks)
- 1c. Write notes on the Arboviridae as one of the RNA viruses (7marks)
- 1d. Name the viral genera in the family Bunyaviridae (5marks)
- 2a. What are virioids? (5marks)
- 2b. Write notes on the nucleic acids in viruses (10marks)
3. Discuss the Clinical or Symptoms of rabies infection (15marks)
4. Write comprehensively on viral symmetry (15marks)
- 5a. Most viral diseases are controlled by the use of vaccine. Discuss the Live-Attenuated Virus Vaccine as one of the vaccine used to control viral diseases (8marks)
- 5b. Neutralization test (N-test) is one of the diagnoses of viral infections; list the variables to be considered in the use of Neutralization test (7marks)

