

**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY**

**SSCHOOL OF HEALTH SCIENCES**

**BSC. PUBLIC HEALTH AND BSC. IN COMMUNITY HEALTH AND DEVELOPMENT**

**END OF SEMESTER EXAMINATION**

**2ND YEAR 1st SEMESTER 2016/2017**

**MAIN**

**COURSE CODE: HCD3212**

**COURSE TITLE: INTRODUCTORY VIROLOGY**

**TIME: 2HRS**

**STREAM: DEGREE**

**INSTRUCTIONS**

1. **This paper contains two section (A and B)**
2. **Answer ALL question in Section A and any TWO (2) questions in Section B**
3. **Write ALL answers in the booklet provided**

**SECTION A: (30 Marks)**

**Answer all questions in this section**

1. Define the following terms [4 Marks]

1. Viroid
2. Capsid
3. Virulence
4. Ambisense

2. Discuss types of capsid symmetries of viruses [6 Marks]

3. Describe unique feature of retrovirus genomes [4 Marks]

4. Describe how prions can lead to formation of fibroids [4 Marks]

5. Outline modes of transmission of Herpesviridae viruses [4 Marks]

6. Describe the structure of a retrovirus, HIV. [4 Marks]

7. Outline mechanisms of cellular injury cause by virus in the host [4 Marks]

**SECTION B (40 Marks): Answer any two questions each carries 20 Marks**

1. Describe methods used in diagnosis of viruses [20 Marks]
2. Describe characteristics and etiology of picornavirus (enteroviruses, rhinoviruses and hepatoviruses) [20 Marks]
3. Describe steps involved in viral replication [20 Marks]
4. Describe how samples can be collected, processed and transport from a remote village in Siaya County to a reference laboratory in the city following a viral disease outbreak.

[20 Marks]