



**JARAMOGI OGINGA ODINGA UNIVERSITY OF  
SCIENCE AND TECHNOLOGY  
SCHOOL OF HEALTH SCIENCES**

**UNIVERSITY EXAMINATION FOR DEGREE IN COMMUNITY HEALTH  
AND DEVELOPMENT**

**2<sup>ND</sup> YEAR 1<sup>ST</sup> SEMESTER 2013/2014 ACADEMIC YEAR**

**CENTER: MAIN CAMPUS**

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**COURSE CODE: HCD 3212**  
**COURSE TITLE: INTRODUCTORY VIROLOGY**  
**EXAM VENUE: STREAM: BSc. In Community Health & Devt.**  
**DATE: 04/12/2013 EXAM SESSION: 9.00-11.00 AM**

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**Instructions:**

- 1. Answer ALL questions in Section A and ANY other 2 questions in Section B.**
- 2. Candidates are advised not to write on the question paper.**
- 3. Candidates must hand in their answer booklets to the invigilator while in the examination room.**

**Section A: Answer ALL Questions (30 Marks)**

1. Briefly describe the basic structure of a virus. (4 marks)
2. What three factors may influence the host range of a given virus? (3 marks)
3. Name the five basic structural forms of viruses in nature, citing an example. (5 marks)
4. Differentiate between *viroids* and *prions*, each with an example. (3 marks)
5. Name and differentiate the two types of virus replication cycles (4 marks)
6. State any five possible outcomes of viral gene mutations (5 marks)
7. Name any three prominent members of the *herpes viruses* and the associated pathologies (6 marks)

**Section B: Answer Any TWO Questions (40 Marks)**

1. Viruses are classified according to the nature of their genome and their structure. Select any Five groups and describe them using these features (you could use a table) (20 marks)
2. Select any viral disease and discuss its development and community health relevance (20 marks)
3. Discuss the Principal Events Involved In Viral Replication, citing relevant examples (20 marks)
4. Discuss any four main targets of antiretroviral therapy against HIV, naming respective drugs (20 marks)