



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE
AND TECHNOLOGY
UNIVERSITY EXAMINATIONS 2012/2013
2ND YEAR 1ST SEMESTER EXAMINATIONS FOR THE DEGREE
OF BACHELOR OF BSC. PUBLIC HEALTH AND BSC
COMMUNITY HEALTH DEVELOPMENT
(KISII LEARNING CENTRE)**

COURSE CODE: HCD 3212

COURSE TITLE: INTRODUCTION TO VIROLOGY

DATE: 16 /4/2013

TIME: 9.00-11.00AM

DURATION: 1.5 HOURS

INSTRUCTIONS

1. This paper contains TWO sections.
2. Answer ALL questions in section A (Compulsory) and ANY other Two questions in section B.
3. Write all answers in the booklet provided

- Q1. a). What are prions? 2mks
b). Why is it difficult to diagnose prions? 3mks
c). How are prions different from viruses? 3mks
d). What characteristics do prion diseases exhibit? 6mks
e). Discuss Creutzfeldt-Jakob disease (CJD) in terms of symptoms, epidemiology, transmission, diagnosis and treatment. 16mks
- Q2 a) what properties should an ideal antiviral drug possess? 8mks
b) List the life cycle stages that have been targeted by potential therapeutic agents. 10mks
c) What is HAART? Give an example. 2mks
- Q3. The Baltimore system of virus classification provides a useful guide with regard to the various mechanisms of viral genome replication. Outline any five classes with their replication cycle. 20mks.
- Q4. a). Describe the four basic types of vaccine in use today. 8mks
b) Outline six problems inherent in developing a good protective anti-viral vaccine. 12mks
- Q5. a). Outline eight Mechanisms of viral transmission. 16mks
b). List the four major Means of viral control with an example of a virus that is best controlled by each means. 4mks.