



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY
SCHOOL OF HEALTH SCIENCES
UNIVERSITY EXAMINATION FOR DIPLOMA IN COMMUNITY HEALTH AND
DEVELOPMENT
1ST YEAR 2ND SEMESTER 2016/2017 ACADEMIC YEAR
MAIN CAMPUS**

COURSE CODE: HDC 2122

COURSE TITLE: INTRODUCTION TO EPIDEMIOLOGY

EXAM VENUE: STREAM: (Dip. Comm Health & Dev)

DATE: EXAM SESSION:

TIME:

Instructions:

- 1. Answer all the 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 in this section (30 marks)

1. Differentiate between epidemiology and public health. (4 marks)
2. Differentiate between descriptive and analytical studies giving two examples of each. (4 marks)
3. Briefly describe randomization as used in Randomized Clinical Trials and give two reasons for randomization (5 marks)
4. Differentiate between a proportion and a ratio. (2 marks)
5. Give three uses of prevalence as a measure of disease occurrence (3 marks)
6. Define phamacoepidemiology. (2 mark)
7. Briefly describe what you understand by re-emerging diseases giving two examples of re-emerging diseases (3 marks)
8. Differentiate between an epidemic and a pandemic (2 marks)
9. Give three reasons why you think non-communicable diseases are on the increase (3 marks)
10. State any two types of association used in epidemiology (2 marks)

SECTION B: Answer any 2 Questions in this section (15 marks each)

1. Discuss the key features of clinical trials (15 marks)
2. Briefly describe cross-sectional studies and give three advantages and three disadvantages of cross-sectional study designs (15 marks)
3.
 - a. Explain the difference between Incidence and prevalence. (6 marks)
 - b. On 23rd of February 2016, 40 new cases of rotavirus infections were reported in Nyapiedho village, a village with a population of 3900 people at the time. There were already 60 people with the disease but 35 had already completed medication and were successfully cured.
Calulte (Show your work);
 - i.) Incidence rate of pneumonia. (3 marks)
 - ii.) The period prevalence rate. (3 marks)
 - iii.) The point prevalence as of 23rd February (3 marks)
4. Briefly describe the levels of disease prevention (15 marks)