



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

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**COURSE CODE: HDC 2122**

**COURSE TITLE: INTRODUCTION TO EPIDEMIOLOGY**

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

**DATE: EXAM SESSION:**

**TIME:**

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**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. State any four uses of epidemiology (4 marks)
4. Differentiate between a risk and a rate as used in epidemiology (2 marks)
5. Differentiate between disease and exposure (4 marks)
6. Define phamacoepidemiology (2 marks)
7. List three examples of communicable and three examples of non-communicable 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. Briefly describe the levels of disease prevention (15 marks)
2. Discuss the key features of clinical trials (15 marks)
3. Briefly describe cross-sectional studies and give three advantages and three disadvantages of cross-sectional study designs (15 marks)
4.
  - a. Explain the difference between Incidence and prevalence. (4 marks)
  - b. State two (2) uses of prevalence in epidemiology (2 marks)
  - b. Fifty new cases of cholera infections were reported in Saints village on 11th May 2016, a village with a population of 2800 people at the time. There were already 47 people with the disease before the said date but 23 had already completed medication and were successfully cured.  
Calclute (Show your work);
    - i.) Incidence rate of cholera (3 marks)
    - ii.) The period prevalence rate (3 marks)
    - iii.) The point prevalence as of 11th May, 0001 hrs (3 marks)