



JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND  
TECHNOLOGY

UNIVERSITY EXAMINATIONS 2012/2013

1<sup>ST</sup> YEAR 2<sup>ND</sup> SEMESTER EXAMINATIONS FOR THE DEGREE  
OF BACHELOR OF SCIENCE IN COMMUNITY HEALTH AND  
DEVELOPMENT

(BUSIA LEARNING CENTRE)

COURSE CODE: HDC 2122

COURSE TITLE: INTRODUCTION TO EPIDEMIOLOGY

DATE: 15/4/2013

TIME: 9.00-10.30AM

DURATION: 1.5 HOURS

INSTRUCTIONS

1. This paper contains two sections.
2. Answer all questions in section A and ANY other 2 in section B.
3. Answer all questions in the booklet provided.

## SECTION A

1. Define the following:
  - a). Epidemiology
  - b). Epidemics
  - c). Screening
  - d). surveillance
  - e). Epidemiological trends(10 marks)
2. What are the measures of occurrence in epidemiology? (3 marks)
3. Name the uses of epidemiology. (4 marks)
4. Name the methods used in sampling in epidemiology. (4 marks)
5. Name four challenges of non- communicable diseases. (4 marks)
6. Name the immunizable diseases. (3 marks)
7. How can you calculate infant mortality rate? (2 marks)

## SECTION B

1. Discuss the differences and similarities of Descriptive and analytical approaches in epidemiology. (10 marks)
  - a). Name the different studies we have in analytical approach. (5 marks)
  - c). what are the approaches used in descriptive studies? (5 marks)
2. Name and explain the stages of illness behaviour in a person. (10 marks)
  - a). What are the characteristic attributes of a mentally healthy person? (10 marks)
3. The following was a study carried out on CHD (Chronic Hypertensive Disease.)

Treatment	CHD	NON-CHD	TOTAL
YES	155	1751	1906
NO	187	1713	1900

- a). What is the incidence in the exposed (those treated)? (6 marks)
- b). What is the incidence in the unexposed (those untreated)? (6 marks)
- c). What is the relative risk? (8 marks)
4. Discuss the criteria for test selection in screening. (10 marks)
  - b). Discuss the goals of a screening program. (10marks)