



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE
AND TECHNOLOGY**

UNIVERSITY EXAMINATIONS 2012/2013

**1ST YEAR 2ND SEMESTER EXAMINATIONS FOR DIPLOMA IN
COMMUNITY HEALTH AND DEVELOPMENT**

(MAIN)

COURSE CODE: HDC 2122

COURSE TITLE: INTRODUCTION TO EPIDEMIOLOGY

DATE 23/4/2013

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**

PART 1 answer all questions (30 marks)

1. Define the following terms (6 marks)
 - a. Epidemic
 - b. Pandemic
 - c. Endemic
2. State the uses of epidemiology (3 marks)
3. List five observational study designs used in epidemiology (5 marks)
4. What is a population in epidemiology (3 marks)
5. Briefly explain three methods for studying populations (6 marks)
6. What is a clinical trial (3 marks)
7. List and 2 types of population flow given examples (4 marks)

PART II answer two questions (30 marks)

1. Discuss 5 methods of sampling for a research study (20 marks)
2. (a) Describe epidemiological triad with the aid of a diagram as used in epidemiologic studies (15 marks)
(b) State the difference and similarity between incidence and prevalence
3. a) There were 200 cases of typhoid recorded in Muhoroni with a population of 200,000 in 2012. During the same year, Iten with a population of 300,000 recorded 250 cases of typhoid.
 - i. What was the prevalence of typhoid in the two towns in 2012
 - ii. Which town has more typhoid cases and why?
b) From 7,999 females aged 16 – 45 years, 2,496 use modern contraceptive methods. What is the proportion of females that use contraception (20 marks)
4. (a) Distinguish between observational and experimental studies given examples in each case (10 marks)
(b) State the difference and similarity between incidence and prevalence (10 marks)