



**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

KISII CAMPUS – PART TIME

COURSE CODE: HDC 2122

COURSE TITLE: INTRODUCTION TO EPIDEMIOLOGY

EXAM VENUE: LR 18

STREAM: DIP. COMMUNITY HEALTH

DATE: 15/12/16

EXAM SESSION: 2.00 – 3.30 PM

TIME: 1 ½ HOURS

Instructions:

- 1. Answer all 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. State the criteria involved in determining a case definition. (2marks)
- 2) State **three** (3) basic uses of epidemiology in the delivery of health care services in Kenya. (3marks)
- 3) a) Briefly explain what you understand by the term "convalescent carriers". (2marks)
b) Discuss briefly the four development stages in the natural history of disease (3marks)
4. Highlight the significance of false positives in an epidemiologic study. (4 marks)
5. Explain the following terms as used in epidemiology:
a) Incidence (1 mark) (b) Endemic (1 mark)
6. Define a specific case definition. (2 marks)
7. Define herd immunity and explain two conditions necessary for herd immunity to occur in a population. (3 marks)
8. Differentiate the following terminologies in disease occurrence
a) Chronic disease (2 marks) (b) Latent disease (2 marks)
9. State three activities involved in secondary preventions. (3 marks)
10. Explain Gordis definition of Epidemiology in the context of Determinants of Health –related events. (2 marks)

SECTION B (30 marks)

1. Discuss systematically the first **five** steps that an epidemiologist would follow in investigating an outbreak of infectious disease. (15marks)
2. Describe the determinants of communicable and non communicable diseases in human population. (15 marks)
3. Explain the following approaches in epidemiology.
a) Descriptive epidemiology. (8 marks)
b) Analytic Epidemiology. (7 marks)
4. a) Discuss the propagated or serial transfer epidemics. (9 marks)
b) Explain the criteria for evaluating a screening programme in terms of the nature of the test. (6 marks)