



**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 2019/2020 ACADEMIC YEAR

KISII CAMPUS

COURSE CODE: HDC2122

COURSE TITLE: INTRODUCTION TO EPIDEMIOLOGY

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

DATE: 2019 EXAM SESSION:

TIME: 1.5 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. a) Define the term epidemiology?(2mks)
- 2) State three(3)basic uses of epidemiology in the delivery of health care services in Kenya.(3mks)
- 3) Briefly explain what you understand by the term” Natural history of Disease".(4mks)

b) Discuss briefly the four development stages in the natural history of disease (3mks)

4. Highlight the significance of false positives and false negatives in epidemiology (4 marks)

5.Explain the following terms as used in epidemiology:

Pandemic (2 marks) Determinants (2 marks)

6. Explain three measures used to control epidemics (3 marks)

7. Define herd immunity and explain conditions necessary for herd immunity to occur in a population (3 marks)

8. Explain various approaches of expressing prognosis of a disease (4 marks)

SECTION B (30 marks)

9) Discuss systematically the first five steps that an epidemiologist would follow in investigating an outbreak of infectious disease.(15)marks

10. Describe the different modes of transmissions of communicable diseases.[15 marks)

11.) Explain the following approaches in epidemiology.

Descriptive epidemiology (8 marks)

Analytic Epidemiology (7 marks)

12. Discuss the propagated or serial transfer epidemics (15 marks)