

## 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 2018/2019 ACADEMIC YEAR

#### **KISII CAMPUS**

COURSE CODE: HDC2122

COURSE TITLE: INTRODUCTION TO EPIDEMIOLOGY

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

DATE: 2018 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)