



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

**UNIVERSITY EXAMINATIONS 2012/2013**

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

**(KISUMU LEARNING CENTRE)**

**COURSE CODE: HCD 3223**

**COURSE TITLE : DISEASE SURVEILLANCE AND OUTBREAK  
INVESTIGATION**

**DATE: 17/4/2013**

**TIME: 11.00-13.00PM**

**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 I: Answer all questions – 30 marks**

1. Define the following terms.
  - a) Surveillance system (2 marks)
  - b) Syndromic surveillance (1 mark)
  - c) Sentinel surveillance (1 mark)
  - d) Passive surveillance (1 mark)
2. List the limitation of disease reporting in surveillance system (5 marks)
3. Name three types of population covered by registries (3 marks)
4. State the surveillance system attribute that are evaluated (4 marks)
5. In outbreak investigation, cases can be classified as: (3 marks)
6. Duration of epidemic is determined by: (3 marks)
7. List the aspects of investigation to be considered when developing hypothesis during outbreak investigation (4 marks).
8. What are the characteristic of person taken in to account when performing descriptive epidemiology in outbreak investigation (3 marks).

**PART II: Answer any two questions - 40 marks**

1. Focusing on transmission dynamics and control points of diseases, describe how prevention and control strategies would be implemented in a disease outbreak (20 marks).
2. Describe various types of surveillance systems (20 marks).
3. Describe steps taken in disease outbreak investigation (20 marks).
4. Outline steps involved in planning a surveillance system (20 marks).