



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE &
TECHNOLOGY UNIVERSITY EXAMINATIONS 2012/2013**

**2ND YEAR 1ST SEMESTER EXAMINATION FOR THE DEGREE
OF BACHELOR OF SCIENCE COMMUNITY HEALTH &
DEVELOPMENT**

(MAIN)

COURSE CODE: HCD 3223

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

DATE: 15 /8/13

TIME: 2.00 - 4.00 PM

DURATION: 2 HOURS

INSTRUCTIONS

- 1. This paper contains five (5) questions.**
- 2. Answer question 1 (compulsory) and ANY other TWO questions.**
- 3. Write all answer in the booklet provided.**

SECTION A – Answer all short answer questions – (30 marks)

1. Define disease surveillance giving local examples: [3 marks]
2. State the 6 common uses and applications of public health surveillance that you know of : [3 marks]
3. Distinguish between Passive surveillance and Active surveillance giving advantages and disadvantages of each [3 marks]
4. Define case definition during an outbreak investigation as you state the THREE commonly used categorization [3 marks]
5. Match the following terms with their definitions by indicating at the blank box A, B and C as applies: (Each correct answer is 1 mark), but whole quiz is [3 marks]

A	Sentinel surveillance		A surveillance system in which the reports of cases come from clinical laboratories as opposed to healthcare practitioners or hospitals
B	laboratory-based reporting		A clinical and laboratory characteristics that a patient must have to be counted as a case for surveillance purposes
C	case definition		A surveillance system in which reports are obtained only from certain selected facilities and populations

6. Explain how a comprehensive description of an outbreak investigations should include the following; [3 marks]
 - a. Time
 - b. Place
 - c. Person
7. Briefly state ways of improving a surveillance systems [3 marks]
8. With examples, distinguish between epidemic and endemic [3 marks]
9. Show the relationship between the prevalence rate and incidence rate [3 marks]
10. Distinguish between active surveillance and passive surveillance as you give advantages and disadvantages of each accordingly (3 marks)

SECTION B – Essay Answer Question

This section has four (4) essay question; Answer any 2 questions

1. Define disease surveillance and discuss the attributes or criteria you would use to evaluate surveillance systems as you provide current examples [20 marks]
2. Describe sources for data that can be used for public health surveillance in Kenya [20 marks]
3. Describe why we may need to investigate possible outbreaks [20 marks]
4. Outline the steps you would use during an outbreak investigation [20 marks]