



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

SCHOOL OF HEALTH SCIENCES

**UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF
SCIENCE IN COMMUNITY HEALTH AND DEVELOPMENT/PUBLIC
HEALTH**

3RD YEAR 1ST SEMESTER 2018/2019 ACADEMIC YEAR

KISII CAMPUS

COURSE CODE: HCD 3311

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

STREAM: BSc. P. Health/Comm Hlth & DvInt

TIME: 2HRS

Instructions

- 1. Answer all questions in section A (compulsory) and any other 2 questions from 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 (30MARKS)

1. Distinguish between the following terms: Primary case and secondary case in disease epidemiology (3mks)
2. Define the terms Endemic and Haloendemic (3mks)
3. Describe three factors that determine the incubation period of an infectious disease (3mmks)
4. Describe three modes of spread of infectious diseases in a population (3mks)
5. Describe the impotencies of carrying out disease surveillane (3mks)
6. Describe the challenges encountered by healthcare workers in routine disease surveillane in kenya (3mks)
7. State the roles of specified health practitioners in disease surveillane (3mks)
8. Describe three factors that contribute to increasing the magnitude of an epidemic (3mks)
9. How can an epidemiologist conclude whether a public health surveillane conducted was able to achieve its goals (3mks)
10. You have received incidence report as a public health official of an unknown disease outbreak, describe four vital questions to be answered as you design to carry out surveillane (4mks)

SECTION B (40 MARKS)

- 1 a). Define Epidemic (2mks)
 - b). Explain types of epidemic outbreaks (8mks)
 - c). Explain the different steps in the investigation of an infectious disease outbreak (10mks)
2. Identify the sources of health surveillane information, describe the sources and state their advantages and disadvantages (20mks)

3. a). Identify and describe five public health important diseases that are under surveillance in Kenya and give reasons of them being under surveillance (14mks)

b). Describe steps that epidemiologists take to improve and obtain quality data during disease surveillance (6mks)

4 a). Discuss the management process of an epidemic (10mks)

b). explain factors that contribute to the emergency of disease epidemics in a population (10mks)