

**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND  
TECHNOLOGY  
SCHOOL OF HEALTH SCIENCES  
BUSIA CAMPUS  
FIRST YEAR FIRST SEMESTER EXAMS  
HCD 2122: INTRODUCTION TO EPIDEMIOLOGY**

**SECTION A: Answer ALL questions in this section (3 Marks each).**

1. Define the term epidemiology.
2. List three methods of collecting epidemiological data.
3. List the levels of disease prevention.
4. Define the following epidemiological terms.
  - a. Sensitivity.
  - b. Specificity.
  - c. Negative and positive predictive value.
5. Briefly discuss descriptive epidemiology.
6. List the features of a good epidemiological surveillance system.
7. List the sources of pharmacoepidemiological data.
8. Giving examples, describe nosocomial infections.
9. List three differences between a prospective and retrospective study.
10. Briefly describe the main types of bias.

**SECTION B**

**Answer any TWO questions from this section (15 marks each)**

1. a). Discuss the epidemiological triad.  
b). Define the following terms:
  - i. Epidemic.
  - ii. Endemic.
  - iii. Pandemic.
2. Discuss the key concepts in the chain of infection.
3. Discuss the factors involved in the emergence and re-emergence of infectious diseases.
4. a) Briefly discuss the levels of disease occurrence  
b) Discuss the occurrence of epidemics in a population.