



JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY
SCHOOL OF HEALTH SCIENCES
UNIVERSITY EXAMINATION FOR BACHELORS IN COMMUNITY HEALTH AND
DEVELOPMENT
2nd YEAR 2nd SEMESTER 2016/2017 ACADEMIC YEAR
KISUMU LEARNING CENTRE

COURSE CODE: HCD 3221

COURSE TITLE: PRINCIPLES OF EPIDEMIOLOGY

EXAM VENUE: STREAM: (BSc Comm Hlth & Dev)

DATE: EXAM SESSION:

TIME: 2.00 HOURS

Instructions:

- 1. Answer all the 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 (30 marks)

1. Define the following terminologies (3 marks)
 - (a) Epidemiology
 - (b) Population attributable risk
 - (c) Epidemic
2. Which factors need to be considered when interpreting geographical distributions of disease? (3 marks)
3. What are the three epidemiological measures of disease frequency and how are they related? (3 marks)
4. Identify three major epidemiological study designs? (3 marks)
5. What are the differences between incidence and prevalence (3 marks)?
6. Explain the limitations of vital registration systems (3 marks)
7. Identify the 3 key parameters of International Classification of Functioning, Disability and Health (ICF) (3 marks)
8. List the methods commonly used to control confounding in the design of an epidemiological study (3 marks)
9. What are the study design factors when basing sample size calculations? (3 marks)
10. State three uses of surveillance in epidemiological practice (3 marks)

Section B : Answer any two Questions (40 MARKS)

1. Discuss the ethical issues in epidemiological studies (20 marks)
2. Write short notes on the following;
 - (a) Ecological studies (5 marks)
 - (b) Cross sectional surveys (5 marks)
 - (c) Case control studies (5 marks)
 - (d) Cohort studies (5 marks)
3. (a) Discuss the levels of prevention (12 marks)
 - (b) Explain the social determinants of health (8 marks)
4. (a) State four types of screening (8 marks)
 - (b) Discuss the steps involved in investigation and control of epidemics (20 marks)

