



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

SCHOOL OF HEALTH SCIENCES

**UNIVERSITY EXAMINATION FOR BACHELOR IN COMMUNITY HEALTH AND
DEVELOPMENT**

3rd YEAR 1st SEMESTER 2013/2014 ACADEMIC YEAR

CENTER: BUSIA

COURSE CODE: HPD 3311

**COURSE TITLE: CONTROL AND PREVENTION OF COMMUNICABLE AND NON-COMMUNICABLE
DISEASES**

EXAM VENUE: STREAM:

DATE: EXAM SESSION:

Instructions:

- 1. Answer ALL 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. Distinguish the usage of the following terms in disease control and prevention using appropriate example for each cases[3 marks]
 - a. **Communicable diseases**
 - b. **Contagious diseases**
 - c. **Non-communicable diseases**

2. Briefly explain the following characteristics used to describe a causative agent according to the various outcomes they present after exposure to a susceptible host [3 marks]
 - a. **Infectivity**
 - b. **Pathogenicity**
 - c. **Virulence**
 - d. **Antigenicity**

3. List **at least 6 tools** that are available for the states for control and prevention of infectious diseases? [3 marks]

4. A patient can present with one of the following; please demonstrate that you understand how to differentiate the three in knowledge of natural history and spectrum of disease? [3 marks]
 - a. **Signs**
 - b. **Symptoms**
 - c. **Syndromes [3 marks]**

5. With examples, briefly describe the concept of “**Iceberg of Disease**” in control and prevention of diseases[3 marks]

6. An infectious agent may be transmitted from its natural reservoir to a susceptible host through different ways, name **TWO major mode of transmission** as you briefly identify the further classification in each giving relevant examples of each [3 marks]

7. Define **a disease carrier** as you list 5 reasons why they are dangerous to public health disease control and prevention [3 marks]

8. Briefly explain the difference between **Sufficient component** and **Necessary component** in Component causes and causal pies model by Ken Rothman in 1976 [3 marks]

9. Identify **6 pre-disposing** factors of **Diabetes Mellitus (DM)** [3 marks]

10. State **at least 2** example of each mention **level of prevention for Coronary Heart Diseases** below[3 marks]
 - a. **Primary prevention for CHD**
 - b. **Secondary prevention for CHD**
 - c. **Tertiary prevention for CHD**

SECTION B – Essay Answer Question

1. This section has four (4) essay question

2. Answer any 2 questions

1.
 - a. Define **elaborately** the concept “**Chain of infection**” as used in control and prevention of infectious diseases [5 marks]
 - b. Discuss the **six requisites (essentials) of a chain of infection** for the perpetuation of communicable diseases giving relevant examples [15 marks]
2.
 - a. Differentiate between the following type of infections giving example of each [6 marks]
 - i. Nosocomial infection
 - ii. Zoonotic infection
 - iii. Emerging infection
 - b. Discuss the concept of **epidemiological transition** [14 marks]
3. A variety of models of disease causation have been proposed to explain why “**disease does not just occur random**” name two model you know of and discuss one of them using one disease as an example [20 marks]
4.
 - a. Distinguish between **Disease Prevention and Disease Control** giving examples of each [3 marks]
 - b. Distinguish between **Disease Elimination and Disease Eradication** giving examples of each [3 marks]
 - c. With examples, describe **four main level of prevention** in epidemiology [14 marks]

Good luck!