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(University of Choice)

**MASINDE MULIRO UNIVERSITY OF
SCIENCE AND TECHNOLOGY
(MMUST)**

(MAIN CAMPUSES)

**UNIVERSITY EXAMINATIONS
2023/2024 ACADEMIC YEAR**

FOURTH YEAR FIRST SEMESTER EXAMINATIONS

**FOR THE BACHELOR OF SCIENCE
IN
EPIDEMIOLOGY AND BIostatISTICS**

COURSE CODE: HEM 413

COURSE TITLE: INJURY EPIDEMIOLOGY

DATE: 6/12/2023

TIME: 2.00-4.00 PM

INSTRUCTIONS TO CANDIDATES

This paper is divided into two sections, **A** and **B** carrying 40 marks and 30 marks respectively: Short Answer Questions (**SAQs**) and Long Answer Questions (**LAQs**). **ANSWER ALL QUESTIONS** in section **A** and **ANY TWO** in section **B**

MMUST observes ZERO tolerance to examination cheating

This Paper Consists of 2 Printed Pages. Please Turn Over

SECTION A 40 MARKS: *This section has 10 questions. Answer ALL the Questions in this section. Each question has 4 Marks*

QUESTIONS

1. Define the following terms as used injury epidemiology (4 Marks)
 - i. Injury
 - ii. Injury epidemiology
 - iii. proportion
 - iv. Prevalence
2. Highlight injury mortality data sources for injury epidemiology (4 marks)
3. Highlight four **Common symptoms of injury** (4 Marks)
4. State four (4) energy types that can cause an injury (4 Marks)
5. Describe advantages of using cohort studies in injury epidemiology
6. State the principles of injury prevention (4 Marks)
7. Describe design approaches that can be used in injury research. (4 Marks)
8. Identify five characteristics of occupational diseases (4 marks)
9. Highlight sources of injury information (4 marks)
10. With the aid of a diagram, explain the injury spectrum. (4 Marks)

SECTION B: 40 MARKS: *This Section had 3 Questions. Answer any TWO questions from this section. Each question has 15 Marks.*

11. You are a public health expert who is charged with the responsibility of controlling injuries in the County. Injury is shown to be an emerging problem in the country. Explain how you would design and build an injury surveillance system in a County under your jurisdiction (15 Marks)
12. Using Haddon's matrix explain how the framework can be used to design motorcycle crash injury prevention strategies (15 Marks).
12. Discuss epidemiology of injuries under the following
 - i. Mechanism
 - ii. Risk factors
 - iii. Complications
 - iv. Treatment
 - v. Prevention and control