



*(University of Choice)*

**MASINDE MULIRO UNIVERSITY OF SCIENCE AND TECHNOLOGY**

**(MMUST)**

**MAIN CAMPUS**

**UNIVERSITY EXAMINATIONS**

**MAIN EXAM**

**2023/2024 ACADEMIC YEAR**

**SECOND YEAR FIRST SEMESTER EXAMINATION**

**FOR THE DEGREE OF BACHELOR OF SCIENCE IN EPIDEMIOLOGY AND  
BIOSTATISTICS AND COMMUNITY HEALTH AND DEVELOPMENT**

**COURSE CODE: HEM, 214, HCD 215**

**COURSE TITLE: COMMUNICABLE DISEASES**

**DATE: 6/12/2023**

**TIME: 11.00-1.00PM**

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**INSTRUCTIONS TO CANDIDATES: ANSWER QUESTION ONE and ANY  
TWO QUESTIONS**

**TIME: 2 Hours**

**MMUST observes ZERO tolerance to examination cheating**

*Paper Consists of 2 Printed Pages. Please Turn Over*

**SECTION A: ANSWER ALLTEN QUESTION 40 MARKS (4MARKS EACH )**

1. Differentiate the following terms in communicable disease unit:
  - i) Diagnostic test and Immunological test (2marks)
  - ii) Disease control and disease management (2marks)
2. Briefly explain how the six infectious disease elements can enable the disease to develop (4marks)
3. Define the following terms as per this course:
  - i) Susceptible host
  - ii) Chain of Infection
  - iii) Portal of exit
  - iv) Contagious disease (4marks)
4. Factors that lower the risk of infection can include Natural defences, list them (4marks)
5. Many infectious diseases have similar signs and symptoms. Samples of body fluids can sometimes reveal evidence of the particular microbe that's causing the illness. Outline the any laboratory test that can help the Physician tailor treatment (4marks)
6. Briefly explain 5 stages in disease development (4marks)
- 7) Why is communicable disease control importance both to the community and epidemiologist? (4marks)
- 8). Outline simple means that can be applied on communicable disease prevention (4marks)
- 9) Outline any 4 importance of diagnostic test in communicable diseases
- 10).State prevention measures of Typhoid fever (4marks)

**SECTION B: ANSWER ANY 2 QUESTIONS 30 MARKS (15MARKS EACH)**

1. In communicable diseases, observational studies are done by the researcher to observe the effects of risk factors, diagnostic test, treatment or other interventions without trying to change who is or isn't exposed to it. Discuss cohort studies and outline the advantages and disadvantages (15 marks)
2. a) Explain how communicable disease intervention can be applied in poor settlement (7marks)
- b) Discuss the methods that can be used to put Tropical diseases under control (8marks)
3. Discuss one of the diseases listed below, including the causative agent, mode of transmission, signs and symptoms diagnosis and prevention and control (15marks)
  - i) Schistosomiasis
  - ii) Poliomyelitis
  - iii) Trypanosomiasis
  - iv) Hepatitis B
  - v) Cholera