



**AMREF INTERNATIONAL UNIVERSITY
SCHOOL OF PUBLIC HEALTH
DEPARTMENT OF HEALTH SYSTEMS MANAGEMENT AND DEVELOPMENT
BACHELOR OF SCIENCE IN HEALTH SYSTEMS MANAGEMENT AND
DEVELOPMENT
END OF SEMESTER EXAMINATION MAY - AUGUST 2024**

HMD 211: Communicable and non-Communicable diseases

DATE: WEDNESDAY 14TH AUGUST 2024

TIME: Start: 9:00AM Finish 11:00AM

INSTRUCTIONS

1. This exam is marked out of 70 marks
2. This Examination comprises TWO Sections
Section A: Compulsory Question (30 marks)
Section B: Long Answer Questions (70 marks)

SECTION A: ANSWER ALL QUESTIONS (30 Marks)

1. Differentiate between overweight and obesity according to the World Health Organization (4 marks)
2. Outline five characteristics of chronic diseases that contribute to the burden placed on a country's health system (5marks)
3. Using four features distinguish between primary and secondary hypertension (4 marks)
4. Match the items on the left to those on the right. Write your responses on the table provided(5Marks)

Diseases		Modes of transmission		
A. Influenza		1. Mosquito bite		
B. Tuberculosis (TB)		2. Direct contact with infected person or contaminated surfaces		
C. HIV/AIDS		3. Contaminated food or water		
D. Malaria		4. Sexual contact, sharing needles, or infected blood		
E. chickenpox		5. Airborne droplets from coughs or sneezes		
A	B	C	D	E

6. State five ways in which the common cold spreads among populations (5 marks)
7. A 55-year-old patient with a history of high blood pressure and a family history of heart disease experiences chest pain during exertion. They describe the pain as a squeezing or tightness in the chest that radiates to the left arm.
 - a. State the most likely cause of this patient's symptoms(2marks)
 - b. Outline the diagnostic test would you recommend to confirm the diagnosis? (3 Marks)
 - c. Name two factors that may contribute to the conditions(2marks)

SECTION B

LONG ANSWER QUESTIONS: ANSWER ANY TWO QUESTIONS

8. A newborn baby is born with a bluish tint to their skin (cyanosis). Upon examination, the doctor hears a murmur during the baby's heartbeat.
- A. Explain four congenital heart defects that could cause these symptoms (cyanosis and heart murmur) (10 Marks)
 - B. Explain how each of the possible defects you listed in 8 (a) above disrupts normal blood flow in the heart. (10 Marks)
9. A 35-year-old woman with a history of homelessness presents to the clinic with a persistent cough lasting for more than 3 weeks. She denies any recent travel or known contact with someone with TB.
- A. State four other clinical features concerning tuberculosis (TB) in this case (4 marks)
 - B. Explain two diagnostic tests you would recommend to confirm or rule out TB in this patient? (6 Marks)
 - C. Explain the importance of public health measures in controlling the spread of tuberculosis. (10 Marks)
10. Public health officials are concerned about the rising prevalence of type 2 diabetes in a specific community. They suspect factors related to lifestyle habits may be contributing. You are tasked to design a brief questionnaire to be distributed within the community to gather data on potential risk factors for type 2 diabetes.
- A. Explain five lifestyle factors you would focus on in your questionnaire (5 Marks)
 - B. Formulate at least 5 questions for the questionnaire that target these factors. (5Marks)
 - C. Explain the management of this condition(10Marks)