



AMREF INTERNATIONAL UNIVERSITY

SCHOOL OF PUBLIC HEALTH

DEPARTMENT OF HEALTH SYSTEMS MANAGEMENT AND DEVELOPMENT

NAME OF PROGRAM

BACHELOR OF SCIENCE IN HEALTH SYSTEMS MANAGEMENT AND DEVELOPMENT

END SEMESTER EXAMS MAY-AUGUST SEMESTER 2024

UNIT CODE: HMD 235 UNIT NAME: HEALTH MANAGEMENT INFORMATION SYSTEM

DATE: AUGUST 2024

TIME: 2 HOURS

START:

FINISH:

INSTRUCTIONS (physical exams)

1. Do not write on this question paper

INSTRUCTIONS

1. This exam is marked out of 50 marks
2. This Examination comprises 2 Sections
3. This online exam shall take 2 Hours
4. Late submission of the answers will not be accepted
5. Ensure your web-camera is on at all times during the examination period
6. No movement is allowed during the examination
7. Any aspect of cheating detected during and or after the exam administration will lead to nullification of your exam
8. For adverse incidences please write an email to: amiu.examinations@amref.ac.ke with copy to HOD

SECTION A IS MANDATORY (30 Marks)

Q1. Define the following concepts of Health Management Information Systems and give an example in each

- a) *Cloud Computing* (2 mark)
- b) *Health Informatics* (1 mark)
- c) *E-health* (1 mark)
- d) *Health Data* (1 mark)
- e) *M-health* (1 mark)
- f) *Health Information* (1 mark)
- g) *Data Sources* (1 mark)
- h) *Data Access* (1 mark)
- i) *Data Flow* (1mark)

Q2. Outline the importance of HMIS across the building blocks of the health systems (5 marks)

Q3. Highlight the Integrated Health Information Architecture and how various information systems work together In a Health facility such as a hospital (HMIS, EMR, LMS, LMIS, HRIS) (5 Marks)

Q4 State 5 characteristics of good information and give relevant examples in health (5 marks)

Q5 In Kenya information systems are very critical for the efficiency and effectiveness of Health management across all levels of the Health care system, outline any 5 Principles of Health Information Systems and give any examples in each (5 marks)

Q6 Outline 5 Health Information System Challenges (5 Marks)

SECTION B: ANSWER Q7 WHICH IS MANDATORY AND CHOOSE ANY OTHER ONE QUESTION BETWEEN Q8 AND Q9 (40MARKS)

Q7. The governor in your county has developed digital health management information systems as envisioned by digital health laws. "E-health," "M-health," and "health informatics" are terms related to the use and management of information and communication in healthcare. While they are interconnected, each term has its focus and scope within digital health management information systems. The governor does not understand them and you as the HMIS Officer you are to brief the governor.

In a discussion demonstrate what is E-health," "M-health," and "health informatics". What do they entail? And their importance in HMIS

(20 marks)

A) E-health

Definition/Refers to:
eHealth entails/Encompasses:
Importance:

b) M-health

Definition/Refers to:
M Health entails/Encompasses:
Importance:

c) health informatics

Definition/Refers to:
Health informatics entails/Encompasses:
Importance:

Q8. The governor through the health management department in your county has appointed you as the head health information systems manager. Your first task in your new job is to ensure there is a robust health management information system in place for routine data that will enable evidence-based decision-making processes. Factoring any concepts of health Management information systems (HMIS), by giving examples to the county health leadership that appointed you, Discuss and Illustrate:

- a) Information Cycle in regard to Collecting data and Processing of Routine Health Data. (5marks)
- b) Presenting information and using Routine HMIS for action, (5marks)
- c) HMIS Integration and Interoperability - (5marks)
- d) Health Information Exchange- (5 marks)

Q9. You are an HMIS Advisor to the Governor in your county that has been facing challenges in healthcare delivery due to fragmented Health Management Information Systems (HMIS). The Governor is concerned about the inefficiencies and lack of coordination in the county's healthcare data management and has asked for a detailed explanation to understand the root causes of this fragmentation. As an advisor, prepare a report for the Governor, explaining 10 KEY reasons why HMIS fragmentation may exist in health programs within the county.

(20 Marks)