MACHAKOS UNIVERSITY

University Examinations For 2018/2019 Academic Year

SCHOOL OF HEALTH SCIENCES

DEPARTMENT OF PUBLIC AND COMMUNITY HEALTH

FIRST YEAR SECOND SEMESTER EXAMINATION FOR

DIPLOMA IN HEALTH RECORDS AND INFORMATION TECHNOLOGY

DHR 009: HEALTH INFORMATION SYSTEMS

DATE: 29/4/2019   **TIME: 2:00 – 4:00 PM**

INSTRUCTIONS:

This paper consists of two sections A and B

Section A is compulsory and has Part (i) and part (ii)

Section B choose any two (2) questions

SECTION A: COMPULSORY

PART (I) MULTIPLE CHOICE QUESTIONS - 10 MARKS

1.   One of the following are Ministry of health primary data sets;

   a)   Antenatal care register and immunization report

   b)   Child welfare clinic register and under five outpatient morbidity report

   c)   Family planning Register and HIV summary report

   d)   National integrated for RH, HIV/AIDS, Malaria, TB and child nutrition Report

2.   The following are MOH primary data

   a)   Health care report and age groups

   b)   Patient vital signs and health care reports

   c)   Daily ward census and hospital workload report

   d)   patient's names and daily ward census

3. Health status indicators include;

   a) Levels of mortality and morbidity

   b) Master patients' index and wellbeing.

   c) Patient's names and ethnic group

   d) Health care statistics and disease lists

4. The components of input category of Health Information System are

   a) production, dissemination and use of information

   b) Personnel, financing, logistics support and information technology

   c) Socioeconomic status and ethnic groups

   d) civil registration and population surveys

5. Ministry of Health (MOH) 711 B Integrated tool is for which report?

   a) information and communications technology (ICT)

   b) Diagnostic Disease Index, HIV/AIDS, Malaria, and TB Report

   c) National integrated for RH, HIV/AIDS, Malaria, TB and child nutrition Report

   d) Immunization and Vitamin "A" summary report

6. The components of Information technology are

   a) Medical and surveillance report

   b) computer hardware and programs software

   c) Immunizations and diagnostic tests

   d) Personnel and financing services

7. The Ministry of Health Report form forms includes;

   a) MOH 105 service delivery form and inpatient register

   b) MOH 364 sexual gender-based violence and child violence register

   c) MOH 505 integrated disease surveillance and response form

   d) MOH 405 Antenatal Care and postnatal Register

8. Some of the specific information sources include;

   a) Patient's tests and summary reports

   b) Radiology tests and logistics support

   c) Immunizations and supplies

   d) Patient Allergies and medical Histories

9.   The hospital administrative data include

   a)   Revenue and medical history

   b)   Drugs supply and diagnostic tests

   c)   Personnel and surveillance report

   d)   Revenue and medical supplies

10.   The elements of data management are

   a)   patient treatment and data collection

   b)   Data storage and diagnostic report

   c)   data processing, dissemination and medical tests

   d)   Data collection, data storage and data processing

PART (II) SHORT ANSWER QUESTIONS -20 MARKS

QUESTION ONE

a)   Define the following terms   (3 marks)

   i)   Data mining

   ii)   Information

   iii)   Routine health information system

b)   Describe briefly the concepts of;

   i)   Integration application in healthcare

   ii)   Interoperability application in healthcare   (2 marks)

   c)   State the application of data mining in healthcare   (3 marks)

d)   Explain the three (3) health service components of a health information system (3 marks)

e)   Discuss the three roles of medical decision-support systems in patient care   (3 marks)

f)   State the three (3) benefits of DHIS 2 in Kenyan health system   (3 marks)

g)   Discuss some three (3) major risks to personal information   (3 marks)

SECTION B CHOOSE ANY TWO QUESTIONS

QUESTION TWO

a)   Explain the benefits of complete interoperability in healthcare   (10 marks)

b)   Describe the characteristics of health care information   (10 marks)

QUESTION THREE

a)   Describe system security principles in healthcare information   (10 marks)

b)   Describe 10 types of the MOH primary data set and their respective code   (10 marks

QUESTION FOUR

a)   Explain how different stakeholders use health information   (10 marks)

b)   Describe importance of health information data quality   (10 marks)

QUESTION FIVE

a)   Discuss the benefits of ICT in healthcare   (10 marks)

b)   Describe the types of Hospital specific information systems   (10 marks)