



(University of Choice)

MASINDE MULIRO UNIVERSITY OF SCIENCE AND TECHNOLOGY (MMUST)

**UNIVERSITY EXAMINATIONS
2023/2024 ACADEMIC YEAR**

THIRD YEAR SECOND TRIMESTER EXAMINATIONS

**FOR THE DEGREE
OF
BACHELOR OF SCIENCE IN NURSING**

COURSE CODE: NCG 323

**COURSE TITLE: HEALTH MANAGEMENT INFORMATION
SYSTEM**

DATE: 8TH APRIL 2024

TIME: 3-6PM

INSTRUCTIONS TO CANDIDATES

Answer ALL questions in this paper.

TIME: 3 Hours

MMUST observes ZERO tolerance to examination cheating

This Paper Consists of 5 Printed Pages. Please Turn Over. ►

MULTIPLE CHOICE QUESTIONS (MCQS)**(20 MARKS)**

1. Characteristics of good information include:-

- a) Being Insufficiently accurate for its purpose.
- b) Being communicated to every person at once
- c) Communicated by an inappropriate channel of communication
- d) Being from a source in which the user has confidence

2. Data related to diagnostic test results of a patient can be classified as:-

- a) Health related information
- b) Clinical information
- c) Health management information
- d) Health services information

3. John is classified as male. The classification based on gender can be categorized as:-

- a) Nominal data.
- b) Ordinal data.
- c) Interval data
- d) Ratio data.

4. Two key obligations of health policy 2014-2030 are:-

- a) Realization of fundamental human rights and social accountability.
- b) Realization of fundamental human rights and contribution to economic development as envisioned by vision 2030
- c) Economic development and social accountability
- d) Realization of fundamental human rights and equity

5. Which one of the following records pertaining to the health is more comprehensive?

- a) Electronic Medical Record (EMR)
- b) Electronic Health Record (HER)
- c) Computerized patient records (CPRs).
- d) Personal Health record (PHR)

6. The acronym IRM in health management information system refers to:-

- a) Information resource Mapping
- b) Information resource management.
- c) Information risk management.
- d) Innovative resource management

7. Which of the following HMIS instruments is misplaced:-.

- a) Maternal Child Booklet
- b) CHANIS record
- c) Outpatient Record Register
- d) Immunization tally sheet

8. Which of the following information will be helpful in facility performance /coverage assessment:-

- a. Stock out information

- b. Hospital staff as per the standards
- c. Number of pneumonia cases admitted in the hospital
- d. Percentage of pregnant women delivered at the health facility.

9. Sources of data for HMIS include:-

- a) Registers, census reports, tallies
- b) Census reports, tallies, surveys
- c) Surveys, registers, tallies
- d) Surveys, census, registers

10. HMIS reforms are required to:-

- a) Reduce data burden
- b) Limit information partnerships
- c) Correct limited funding
- d) Enhance culture of information generation and use.

11. Health Management Information System serves to provide information to health care providers for the purpose of assessing:

- a) Staff workload in relation to facility establishment
- b) Quality of health service provision.
- c) The number of medical conditions seen in the health facility
- d) Utilization of drugs and their proper storage.

12. The objective of the data quality audit tool is:-

- a) Audit the entire monitoring and evaluation system of a country's response to HIV/AIDS, TB and Malaria.
- b) Verify the quality of data reported for key indicators
- c) Looks at non established standards programme level output indicators
- d) Address a limited scope.

13. Information use depends on all the following except:-

- a) Timeliness
- b) Relevance
- c) Form
- d) Attributes of the sender

14. Data collation refers to:-

- a) Data collection
- b) Presentation of data.
- c) Assembly of written information into standard order.
- d) Data capture and recording

15. Which of the following is TRUE about plans for dissemination and use of information:-

- a) It should only target the relevant group or population.
- b) Same information products are expected to be produced for reporting and dissemination
- c) During dissemination, print and broadcast media for general population

- d) Patients, community health volunteers and health care staffs are the only beneficiary of health information.

16. District Health Information software (DHIS2):-

- a) Has been changed to county Health Information system (CHIS 2)
- b) Is a tool for collection, validation, analysis and presentation of aggregated data.
- c) It only hosts community health information system
- d) Not tailored to integrated health information management.

17. Data repository:-

- a) Is a form of data collection platform?
- b) Entails a set of logically and un related data stored together
- c) Entails a set of logically and related data stored together
- d) Focuses on electronic data only

18. Indexing of data sets refers to:

- a) Getting the right information to right manager at the right time
- b) Providing for storage of information to permit its use again if needed
- c) Classifying information for storage and retrieval purposes
- d) Categorization of data.

19. Characteristics of a good indicator includes the following except:

- a) Reliable
- b) Verifiable
- c) Sensitive
- d) Appropriate

For Question 20, Indicate if TRUE or False

20. i) ICD-11 is the most current version of International Classification of Diseases .

ii) The ultimate objective of health information systems is therefore not to improve action but to gain information.

PART TWO: - SHORT ANSWER QUESTIONS

(40 Marks)

1. Explain three objectives of a Health Management Information System (6 marks)
2. Explain two types of Health Management Information System (HMIS) (4 marks)
3. Describe the role of clinical decision support system in modern health care organization.
6 marks
4. State five Data management policies or regulations utilized in health institutions (5 marks)
5. Describe any five (5) security measures you would put in place to ensure data security and confidentiality. (10 marks)
6. Discuss three ways in which you can ensure HMIS is simple and sustainable. (9 marks)

SECTION C [LONG ANSWER QUESTIONS]**(40 marks)**

1. Discuss five practical solutions to common deficiencies of the existing health information systems in Kenya [20 marks]
 2. As a Health Management Information System officer working in a county referral hospital, suggest five measures that you can put in place to ensure that data collected by the system is of high quality. [10 Marks]
- b) By use of relevant examples, describe any three factors that influences use of data that is found in the health Management information system [10 Marks]

