namibia university
of science and technology

FACULTY OF HEALTH AND APPLIED SCIENCES

DEPARTMENT OF HEALTH SCIENCES

QUALIFICATION: BACHELOR OF SCIENCE IN HEALTH INFORMATION SYSTEMS MANAGEMENT	
QUALIFICATION CODE: 07BHIS	**LEVEL:** 5
COURSE CODE: IHI521S	**COURSE NAME:** INTRODUCTION TO HEALTH INFORMATICS
SESSION: NOVEMBER 2019	**PAPER:** THEORY
DURATION: 3 HOURS	**MARKS:** 100

FIRST OPPORTUNITY EXAMINATION QUESTION PAPER	
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INSTRUCTIONS
1. Answer ALL the questions.
2. Write clearly and neatly.
3. Number the answers clearly.

PERMISSIBLE MATERIALS
Pen, Pencil and Eraser

THIS QUESTION PAPER CONSISTS OF 5 PAGES (including this front page)

SECTION A MULTIPLE CHOICE [10]
Write only the correct letter of your choice in the answer book.

1. The electronically stored health information about one individual uniquely identified by an identifier? [1]

   a) ERP
   b) EHR
   c) HIS
   d) CPOE

2. The knowledge base systems that include built in procedure for determining when and how to use knowledge is called_____ [1]

   a) Expert system
   b) Knowledge-Based system
   c) Decision support systems
   d) Management information systems

3. Which hardware device type is cable of transferring data and information from one computer to another? [1]

   a) Keyboard device
   b) Mouse device
   c) Communication device
   d) Pointer device

4. Classifying, sorting, organising, summarizing, graphing and calculating are techniques used to process data into: [1]

   a) Data
   b) Information
   c) Health informatics
   d) Wisdom

5. Defined as the system that process data and organise the various elements into meaningful units of information? [1]

   a) Electronic Health information
   b) Information system
   c) Health information exchange

d) Health information management

6. Defined as the system that process data. Organise the various elements into meaningful units of information: [1]
   a) Software
   b) Networks
   c) Computer system
   d) Hardware

7. An organised collection of interrelated information about a specific topic is usually referred to as: [1]
   a) Wisdom
   b) Communication
   c) Knowledge
   d) Decision

8. A network recommended for hospital such as Katutural central hospital in Windhoek to enhance mobility [1]
   a) Local areas network
   b) Wireless local area network
   c) Metropolitan Network
   d) Wide area network

9. A programmable machine capable of performing a series of logical and arithmetic operations. [1]
   a) Computer
   b) Hardware
   c) Software
   d) Information Technology

10. Occurs when someone uses another person's personal information with or without that individual 's knowledge or consent to obtain healthcare or receive payment.: [1]
    a) Medical identity theft
    b) Identity theft
    c) Computer theft
    d) Information theft

SECTION B: TRUE OR FALSE   **[10]**
Write TRUE OR FALSE answer in the answer book provided

1. As part of the patient's medical record, the identification form or face sheet is considered both a clinical and administrative document.   **[1]**

2. An Electronic Health Record (EHR) is an electronic record of health-related information on an individual that can be managed, shared, and controlled by that individual.   **[1]**

3. Data currency refers to the availability of medical information such as critical lab values to in a timely manner.   **[1]**

4. IT systems alone have been shown to improve data accessibility and legibility.   **[1]**

5. WLAN- does not use wires for communication between servers and the client computer, or mobile devices.   **[1]**

6. A data mart is a simple form of a data warehouse that is focused on a single subject (or functional area), such as Sales or Finance or Marketing.   **[1]**

7. The primary focus of the planning and analysis phase is on the business problem or the organisation's strategy, independent of any technology that can or will be used.   **[1]**

8. Desktop computers are expensive than PCs but have same power and capabilities, mall sizes and portability.   **[1]**

9. Internet is a collection of computer and other hardware devices, such as a printer, scanner, or file server, that are connected together using communication devices and transmission media.   **[1]**

10. Knowledge is a collection of interpreted pieces of information and data.   **[1]**

SECTION C   STRUCTURED QUESTIONS   **[80]**

Answer the following questions.

1. Define the following terminologies   [10]
   a. Information System (HIS)
   b. Health Informatics
   c. Encryption.
   d. Network
   e. Communication device

2. Data is entered into the computer by means of input device and displayed to users by means of an output devices. List three **input devices** and three **out devices** used?   [3]

3. Differentiate between data information and knowledge with examples and explain the importance the three has about information systems).   [3]

4. State the benefits of Health Information Systems (HIS)   [5]

5. As Health Information System Managers, your role in health sector is to manage Health Information Systems. Identify and discuss any (5) five health Information systems automated to render quality health care to patients?   [10]

6. With description, identify the major types of systems used in healthcare, give at least two (2) examples of each?   [10]

7. Identify 5 (five) users of health information you think will benefit from computerisation of health records?   [5]

8. List the major types of computer applications or programs used in healthcare?   [5]

9. Hospital Information System HIS are group of systems used in healthcare to support and enhance patient care. List five (5) challenges that you think can hold back successful implementation of (HIS) in Namibia?   [10]

10. Another important concept in understanding databases is relationships–that refers to how data in the database is related. Name and describe the three types of relations, use diagrams to show the relation in healthcare   [6]

11. With the use of diagram, design a labelled graphical user interface suitable for health informatics practitioners users   [10]

12. Information sources used in professional and academic setting are classified into sources. Name and discuss the three (3) types of information sources?   [3]

END-OF-EXAMS