ΠΑΜΙΒΙΑ UΠIVERSITY
OF SCIENCE AND TECHNOLOGY

FACULTY OF HEALTH, APPLIED SCIENCES AND NATURAL RESOURCES

DEPARTMENT OF HEALTH SCIENCES

QUALIFICATION: BACHELOR OF SCIENCE IN HEALTH INFORMATION SYSTEMS MANAGEMENT	
QUALIFICATION CODE: 07BHIS	**LEVEL:** 6
COURSE:POLICY IN HEALTH INFORMATION SYSTEMS	**COURSE CODE:** PHS611S
SESSION: JULY 2022	**PAPER:** THEORY
DURATION: 3 HOURS	**MARKS:** 100

SUPPLEMENTARY/SECOND OPPORTUNITY EXAMINATION QUESTION PAPER	
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MODERATOR	Ms Elizabeth Ndakukamo

INSTRUCTIONS
1. Answer ALL the questions.
2. Write clearly and neatly.
3. Marks for each question are indicated at the end of each question.

THIS QUESTION PAPER CONSISTS OF 4 PAGES (including this front page)

QUESTION 1   **[20 MARKS]**

1.1   Assess whether the following statements are **True** or **False**.
        (One mark for each question)   (10)

1.1.1   Spyware and Adware are examples of cybersquatting.

1.1.2   Behavioural fragmentation results from narrow programmatic interests, inadequate
        training and the lack of appropriate skills of health managers and providers.

1.1.3   Privacy is observation or intrusion into one's private affairs and to maintain control over
        certain personal and health information.

1.1.4   PSEMAS stands for Public Service Employability Medical Aid Scheme.

1.1.5   To maintain confidentiality, authorized third parties must be prevented from accessing
        and viewing medical data.

1.1.6   Different categories of data require different levels of protection based on their
        sensitivity.

1.1.7   Data collection refers to all aspects of data handling from storage, quality assurance and
        flow to processing, compilation and analysis.

1.1.8   Open MRS is an electronic medical record system with a focus on primary health care
        services.

1.1.9   Data integration allows patients and their selected representatives to access their health
        information electronically.

1.1.10 Denial of service attacks are known to disrupt the computer operations and affect data
        stored.

1.2   Enumerate the six (6) inputs and outputs to a Health Information System.   (6)

1.3   Identify four (4) overall health system goals/outcomes according to the World Health
        Organization (WHO) framework.   (4)

QUESTION 2 [20 MARKS]

2.1   Differentiate between the following concepts and provide suitable examples:

2.1.1 Health System and Health Information System   (4)
2.1.2 Interoperability and eHealth Interoperability   (2)
2.1.3 Sensitive Data and Non-Sensitive Data   (4)
2.1.4 The computer as a Weapon and as a Target   (6)
2.1.5 Technical Interoperability and Semantic Interoperability   (4)

[SECTION C]

QUESTION 3 [20 MARKS]

3.1   Describe the following terms:

3.1.1 Information Security   (3)

3.1.2 Health Information Exchange   (3)

3.1.3 Cybercrime   (3)

3.1.4 Data Quality   (3)

3.1.5 Unauthorized Intrusion   (3)

3.2   Outline any two (2) ways for achieving Health Information System Integration   (2)

3.3   Describe any three (3) revolutionary drivers for digitalized Health Information Systems (3)

QUESTION 4   **[40 MARKS]**

4.1   Discuss the six (6) main tools to maintain security and privacy of personal
      Health Information.   (18)

4.2   Describe any five (5) types of Cybercrime activities.   (10)

4.3   Discuss the six (6) overall Health System building blocks. Use the World Health
      Organization functional model in figure 1 below.   (12)
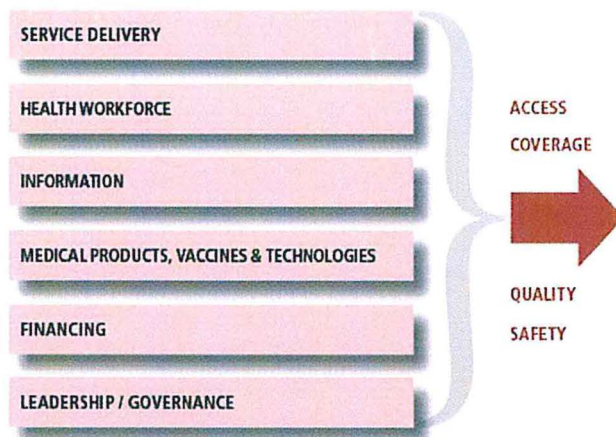
THE WHO HEALTH SYSTEM FRAMEWORK

SYSTEM BUILDING BLOCKS

SERVICE DELIVERY

HEALTH WORKFORCE   ACCESS
                                                                   COVERAGE
INFORMATION

MEDICAL PRODUCTS, VACCINES & TECHNOLOGIES

                                                                   QUALITY
FINANCING   SAFETY

LEADERSHIP / GOVERNANCE

Figure 1

TOTAL: 100 MARKS

BEST OF LUCK