



PAMIBIA 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: JANUARY 2019	PAPER: THEORY
DURATION: 2 HOURS	MARKS: 80

SECOND OPPORTUNITY/SUPPLEMENTARY EXAMINATION QUESTION PAPER	
EXAMINER(S)	Ms Irja Shaanika
MODERATOR	Dr Suama Hamunyela

INSTRUCTIONS
1. Answer ALL the questions. 2. Write clearly and neatly. 3. Number the answers clearly.

PERMISSIBLE MATERIALS
None.

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

Section A: Multiple Choice

(15 marks)

1. Which of the following is an output device and also an input device? (1 mark)
 - a) Touch Screen
 - b) Monitor
 - c) Projector
 - d) Pen Input

2. Internal memory of the computer is known as _____? (1 mark)
 - a) Hard drive
 - b) Radom Access Memory
 - c) Read Only Memory
 - d) RAM and ROM

3. The following is NOT an example of the storage devices. (1 mark)
 - a) Flash memory devices
 - b) Plotters
 - c) Hard drive
 - d) CD

4. User interacts with a computer through _____ and input device. (1 mark)
 - a) Interface
 - b) Operating system
 - c) Applications
 - d) Software

5. _____ is an input device that converts character or graphics patterns into digital data. (1 mark)
 - a) Motherboard
 - b) Radio frequency identification
 - c) Scanner
 - d) Chip

6. _____permits the manipulation of numbers in a format of rows and columns. (1 mark)
 - a) Calculator
 - b) Integrated software
 - c) Suites
 - d) Spreadsheet software

7. A patient may be receiving several different types of medications. How would you describe such type of data relationship? (1 mark)
 - a) One-to one
 - b) Many-to-many
 - c) One-to- many

8. Data is stored in an orderly and systematic structure called a _____. (1 mark)
- a) Mainframe computer
 - b) Database
 - c) Random Access Memory
 - d) Arithmetic Unit
9. Information that is _____ does not contain errors or misleading information. (1 mark)
- a) Timely
 - b) Verifiable
 - c) Comprehensive
 - d) Accurate
10. _____ are applications that patients use to maintain copies of their own healthcare information. (1 mark)
- a) Administrative Information Systems
 - b) Clinical Information Systems
 - c) Consumer information System.
 - d) Personal Healthcare Records
11. The processor and memory chips reside on the _____? (1 mark)
- a) Central Processing Unit
 - b) Cache memory
 - c) Motherboard
 - d) Random Access Memory
12. The _____ “wakes up” the computer through a set of commands and routines that make the computer recognise the central processing unit, memory, keyboard, disk drives. (1 mark)
- a) Operating System
 - b) Central Processing Unit
 - c) Arithmetic Logic
 - d) Random Access Memory
13. _____ enables a user to define the properties of the data. (1 mark)
- a) Data definition languages
 - b) Data manipulation languages
 - c) Data relationships
 - d) Databases management systems
14. _____ is a subset or smaller-focus database designed to help managers make strategic decisions. (1 mark)
- a) Data Warehouse
 - b) Data Mart
 - c) Data Mining
 - d) Datasets

15. A _____ database model is like a tree or organisational chart.
(1 mark)

- a) Flat table
- b) Network
- c) Relational
- d) Hierarchical

Section B: Structured Questions

(65 marks)

1. List any 3 Health Information Systems and discuss their roles in the hospital. (6 marks)
2. Discuss the history of computers in healthcare. (5 marks)
3. Data is entered into the computer by means of input devices. List 3 input devices and elaborate how each device is used to enter data in the computer. (9 marks)
4. What are the three categories of Information Systems users? Discuss each category's purpose in Healthcare Information System? (9 marks)
5. Briefly explain how the following technologies can be used in hospitals to support clinical care. (6 marks)
 - a) Wireless Fidelity (Wi-Fi) (2 marks)
 - b) Bluetooth (2 marks)
 - c) Radio Frequency Identification (RFID) (2 marks)
6. What is the purpose of the Basic Input Output System (BIOS) in your computer? (3 marks)
7. Discuss three types of problems caused by poor quality data in hospitals. (6 marks)
8. Discuss volume, velocity and variety as characteristics of big data. (6 marks)
9. Discuss the following components as part of the Information Systems. (6 marks)
 - a) People (2 marks)
 - b) Hardware (2 marks)
 - c) Policies and procedures (2 marks)
10. Explain how a computer's primary memory is different from its secondary memory. Give an example for each memory type. (6 marks)

The End