CHUKA   **UNIVERSITY**

UNIVERSITY EXAMINATIONS

FIRST YEAR EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR OF EDUCATION ARTS

HRIM 171: COMPUTER APPLICATIONS FOR HEALTH INFORMATION MANAGEMENT I

STREAMS: BSC (HEALTH RECORDS)   **TIME: 2 HOURS**

DAY/DATE: TUESDAY 14/04/2020   **2.30 PM – 4.30 PM**

INSTRUCTIONS:

Answer question ONE and any other TWO questions.

QUESTION ONE { 30 MARKS }.

a) Describe the concept of computer processing hardware, detailing the functionalities of its main components.   [7 marks]

b) Explain four characteristics of a modern database management system. [8 marks]

c) Discuss the computer categories according to their functionality.   [6 marks]

d) Outline the steps followed when copying files using windows explorer.   [5marks]

e) state two advantages and two disadvantages of the data base storage systems.
                                                                    [4 marks]

QUESTION TWO {20 MARKS}.

a) With an aid of a diagram discuss the three - tier architecture of database management system.   [12marks]

b) State and explain **four** different types of computer registers.   [4marks]

c) Distinguish between Database Schema and Database instance, hence explain the two
types of database schema as used in database management system: [4 marks]

QUESTION THREE   { 20 MARKS }

a) Describe the main features of SPSS and Stata statistical packages.   [10marks]

b) Explain the term spreadsheet and discuss three basic data types used in the spreadsheets.
                                                                              [10 marks]

QUESTION FOUR { 20 MARKS }.

a) Distinguish between analytic and operational data bases and state three functions of tools
of a data base program.   [7marks]

b) Outline the steps and conditions followed when developing a good database design.
                                                                              [7 marks]

c) List and explain any three types of web browsers.   [6marks].

QUESTION FIVE   { 20 MARKS }

a) Explain the following types of communication networks.   [6marks]

   i   LAN
   ii WAN
   iii   MAN

b) Contrast wired communication channels against wireless communication channels.
                                                                              [10 marks]

c) State four components of a typical communication network.   [4marks]