TECHNICAL UNIVERSITY OF MOMBASA

INSTITUTE OF COMPUTING AND INFORMATICS

DEPARTMENT OF BUSINESS ADMINISTRATION

UNIVERSITY EXAMINATION FOR:

BACHELOR OF COMMERCE / BACHELOR OF BUSINESS

ADMINISTRATION

EIT 4103: FUNDAMENTALS OF COMPUTER SYSTEMS

END OF SEMESTER EXAMINATION

PAPER B

SERIES: AUGUST 2019

TIME: 2HOURS

DATE: Pick Date Aug 2019

SECTION A (30 MARKS) - COMPULSORY

Question One

a) What is a system unit, with reference to a computer **(1 Mark)**

b) Explain the difference between computer hardware and computer software. **(2 Marks)**

c) Outline two advantages of cache memory **(2 Marks)**

d) Distinguish between first generation computers and second generation computers **(6 Marks)**

e) Computerizing business operations may require the users of the computers to be trained. State clearly four reasons for training employees on how to use computers**. (2 Marks)**

f) Highlight three sources of computer viruses. **(3 marks)**

g) Differentiate between RAM and ROM. **(4 Marks)**

h) State and clearly explain the functions of the different components of the Central Processing Unit

(6 Marks)

i) Convert the following

  i). 83_{10} to its binary equivalent

  ii). 745_{10} to its octal equivalent **(4 marks)**

SECTION B (40 MARKS) ANSWER ANY TWO QUESTIONS

Question Two

a) By citing an example in each case, differentiate between the following terms as used in computer

  i). Primary Memory and Auxiliary Memory **(4 Marks)**

  ii). Utilities Software and Operating System **(4 Marks)**

  iii). System Software and Application software **(4 Marks)**

b) Highlight the characteristics of secondary memory **(4 Marks)**

c) Computers have various applications in the real life situation. Highlight four application areas in which computers are being used at our homes. **(4 Marks)**

Question Three

Discuss in detail the application of computers in the following sectors: **(20 Marks)**

  a) Banking
  b) Education
  c) Healthcare
  d) Security

Question Four

a) State two advantages of inkjet printers and two disadvantages of laser printers **(4 Marks)**

b) Explain clearly what impact printers are, then state their characteristics. **(5 Marks)**

c) Explain clearly what non-impact printers are, then state their characteristics **(5 Marks)**

Write the following abbreviations in full, then contrast their characteristics

    i).   SRAM

    ii).   DRAM   **(6 marks)**

Question Two

a) By citing an example, outline and describe two categories of flat-panel display monitors

(6 Marks)

b) By citing an example in each case, classify computers according to the type of data which they manipulate or according to technology **(9 Marks)**

c) Giving examples, outline and describe the different categories of keys on the computer keyboard

(**5 Marks)**