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 A

SERIES: AUGUST 2019

TIME: 2HOURS

DAT: Pick DateAug2019

Instructions to Candidates
You should have the following for this examination
-Answer Booklet, examination pass and student ID
This paper consists of **FIVE** questions. Attemptquestion ONE (Compulsory) and any other TWO questions.
Do not write on the question paper.

SECTION A (30 MARKS) - COMPULSORY

Question One

a) What is a computer system   **(1 Mark)**

b) Uhasibu Company is an accountancy and audit consulting firm. In 2016, they decided to computerize most of their functions. Clearly outline any four benefits that may be realized by the computerization process.   **(4 Marks)**

c) Distinguish between second generation computers and third generation computers   **(6 Marks)**

d) What is meant by the following terms as used in computing:

   i). Application Software

   ii). Utility Software

iii).   Operating System   (3 Marks)

e) Differentiate between RAM and ROM.   (4 Marks)

f) Outline two drawbacks of cache memory   (2 marks)

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

                                                                                      (6 Marks)

h) Convert the following

   i). 57_{10} to its binary equivalent

   ii). 172_{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, classify computers according to the type of data which they manipulate or according to technology   (9 Marks)

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

                                                                                      (5 Marks)

c) Ali, a first year BCOM student intends to buy a computer. Explain any three specifications that he should consider when sourcing for a computer.   (6 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) Outline two example of each of the printers below   (4 Marks)

   i).   Character printers

   ii). Line Printers

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 describe what each of them means

     i).   PROM

    ii).   EPROM

    iii).   EEPROM   **(6 marks)**

Question Five

a) Using a clearly labelled diagram, describe in detail the different hardware components of a computer system

(20 Marks)