



TECHNICAL UNIVERSITY OF MOMBASA
INSTITUTE OF COMPUTING AND INFORMATICS

Select department

UNIVERSITY EXAMINATION FOR:

BBASEP2017/J-FT

EIT 4103: FUNDAMENTALS OF COMPUTER SYSTEMS

SPECIAL/SUPPLEMENTARY EXAMINATION

SERIES: SEPTEMBER 2018

TIME: 2HOURS

DATE: Sep 2017

Instructions to Candidates

You should have the following for this examination

-Answer Booklet, examination pass and student ID

This paper consists of **FIVE** questions. Attempt question ONE (Compulsory) and any other TWO questions.

Do not write on the question paper.

Question ONE

- a) Discuss three functions of an operating system. **(6 Marks)**
- b) Distinguish between primary and secondary storage. **(4 Marks)**
- c) Apart from protecting your computer from virus, describe any six other ways of ensuring your organizational data is secure. **(12 Marks)**
- d) Explain the following terms **(8 Marks)**
 - i. Bus ii. Computer Software iii. Computer iv. Computer Hardware

Question TWO

- a) List and describe three different types of computer software. [give examples for each] **(9 Marks)**
- b) Using relevant examples discuss the triad of computer security **(11 Marks)**

Question THREE

- (a) Define the term computer virus and describe three ways in which computer systems can be infected by viruses. **(4 Marks)**

- (b) Explain why it is beneficial for a company court to purchase readymade software than have one produced for them by internal programmer. **(10 Marks)**
- (c) Differentiate between super computers, mainframe computers and microcomputers. **(6 Marks)**

Question FOUR

- a) Discuss three categories of input devices and two categories of output devices giving relevant examples. **(10 Marks)**
- b) Differentiate between RAM and ROM (Give three differences) **(6 Marks)**
- c) Differentiate between data and information. **(4 Marks)**

Question FIVE

- a) Discuss two factors to consider when purchasing a printer. **(4 Marks)**
- b) Using instruction set architecture differentiate RISC (Reduced Instruction Set Computer) and CISC (Complex Instruction Set Computer) processors [give an example for each] **(10 Marks)**
- c) State and explain THREE types of computer buses. **(6 Marks)**