



TECHNICAL UNIVERSITY OF MOMBASA
INSTITUTE OF COMPUTING AND INFORMATICS

Select department

UNIVERSITY EXAMINATION FOR:

BTITSEP2017/J-FT, BBITSEP2017/J-FT, BSITSEP2017/J-FT, BCOMSEP2017/J-FT, BCOMSEP2017/S-FT, BBA/BCOMSEP2017/S-PT, CCI 4101 /EIT 4101 /EIT 4150: INTRODUCTION TO COMPUTER SYSTEMS/ FOUNDATIONS OF COMPUTER SYSTEMS/ INTRODUCTION TO IT SPECIAL/SUPPLEMENTARY EXAMINATION

SERIES: SEPTEMBER 2018

TIME: 2HOURS

DATE: Sep2017

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) Show your understanding of the following terms and give **an example** in each case. (8 marks)
- i) Primary memory
 - ii) Utilities software
 - iii) Impact printers
 - iv) Operating System
- b) Perform the following computations
- i) $2567_8 + 3476_8$ (2 marks)
 - ii) $1100100_2 - 0110111_2$ (3 marks)
 - iii) $(11101001110)_2 = (?)_8$ (3 marks)
- c) Control unit directs and coordinates most of the operations in the computer. For every instruction, the control unit repeats a set of four basic operations called the machine cycle. State and explain the **four** basic operations of the machine cycle. (8 marks)
- d) Buying a computer from the market requires a careful consideration. Explain any **three** specifications that one should considered when sourcing for a computer. (6 marks)

Question TWO

- a) It has been observed that most of modern businesses are using computers in their operations. Explain any **five** reasons concerning computers so as to support the observation. (10 marks)
- b) 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. (4 marks)
- c) Highlight **six** reasons why computer system requires a secondary storage. (6 marks)

Question THREE

- a) By citing an example in each case, classify computers based on the type of data which they can manipulate. (10 marks)
- b) For a computer to operate, the '**Systems Software**' and the '**Application Software**' have to be installed. By citing an example in each case, briefly explain the **two** terms as used in computing. (4 marks)
- c) Describe any **three** opportunities that the Business people can exploit by having the computer network which is connected to the Internet (6 marks)

Question FOUR

- a) Highlight **two** advantages and **three** disadvantages of a Cache memory. (5 marks)
- b) State **five** software characteristics that you will emphasize that the management checks for when shopping for the software. (5 marks)
- c) A Database is the backbone of the data storage and subsequent information processes in an organization. Explain any **three** advantages and **two** disadvantages of using a database system in an organization. (10 marks)

Question FIVE

- a) Describe any **four** electronic oriented systems that can be used to enhance the communication in an organization. (8 marks)
- b) The process of computerizing business operations may increase benefits, however many companies are negatively affected by use of defective data. Explain **six** reasons why this might be the case. (12 marks)