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# KIRIRI WOMENS' UNIVERSITY OF SCIENCE AND TECHNOLOGY UNIVERSITY EXAMINATIONS, 2019/2020 ACADEMIC YEAR FIRST YEAR, FIRST SEMESTER EXAMINATIONS FOR THE DEGREE OF BACHELOR OF SCIENCE (COMPUTER SCIENCE)

Date: 9<sup>th</sup> April, 2019 Time: 2.30pm – 4.30pm

# KCS 100 – FUNDAMENTALS OF COMPUTING

# INSTRUCTIONS TO CANDIDATES

ANSWER QUESTION ONE (COMPULSORY) AND ANY OTHER TWO QUESTIONS

QUESTION ONE (30 MARKS)

a) Distinguish Emissive Displays from Non-Emissive Displays flat-panel displays (4 marks)

b) Compare and contrast between main memory and secondary storage (5 marks)

c) Why is the motherboard considered as the backbone of a computer? Highlight the features of the computer motherboard . (5 marks)

d) Perform the following computations:

i) Convert 724<sub>8</sub> into a Decimal Number (4 marks)

ii) Convert 1010111011<sub>2</sub> into hexadecimal number (4 marks)

e) Explain the applications of micro-computers in engineering field (8 marks)

#### **QUESTION THREE (20 MARKS)**

a) Discuss the classification of computers according to speed and computing power.

(10 marks)

b) Describe the functions of the control unit of the CPU (10 marks)

# **QUESTION FOUR (20 MARKS)**

a) All types of computers follow the same basic logical structure. Explain the basic operations of the computer

(10 marks)

b) Describe the relationship between computer Hardware and Software.

(10 marks)

## **QUESTION FIVE (20 MARKS)**

a) Discuss any five functions of the computer operating system.

(10 marks)

b) Explain the examples of application software and their functions.

(10 marks)