MAASAI MARA UNIVERSITY

REGULAR UNIVERSITY EXAMINATIONS
2022/2023 ACADEMIC YEAR
FIRST YEAR SECOND SEMESTER

SCHOOL OF ARTS, HUMANITIES, SOCIAL SCIENCES AND CREATIVE INDUSTRIES DIPLOMA IN SOCIAL WORK AND COMMUNITY DEVELOPMENT, DIPLOMA IN CRIMINOLOGY

COURSE CODE: DSS 1200/CRM 104
COURSE TITLE: COMPUTER APPLICATIONS

DATE: 25/4/2023   TIME: 1100-1300 HRS

INSTRUCTIONS TO CANDIDATES

- This paper contains **FIVE(5)** questions
- Answer question **ONE(1)** and **ANY** other **TWO(2)** questions from section II
- Question one is **compulsory**

SECTION I, COMPULSORY
QUESTION ONE (30 MARKS)
(a) Define the term computer, and describe the relationship between data and information. **(5 marks)**
(b) Draw a block diagram to illustrate the basic organization of a computer system and explain the function of various units**. (8 marks)**
(c) In a computer system which component is more important, the hardware or software? Explain your answer. **(3 marks)**
(d) How are computers classified? **(3 marks)**
(e) Convert the following binary numbers to decimal. Show all your workings.
(6marks)

   i)   11011111
   ii)   11100111
   iii)   11110011

(f) What does connecting to the internet require? **(3marks)**
(g) What type of operating system was used in the first generation of computers?
(2marks)

SECTION II, Answer ANY TWO Questions in this SECTION
QUESTION TWO (20 MARKS)
(a) Explain how a computer works. **(4marks)**
(b) Describe in terms of input, processing and data, the production of a letter using a computer. What happens first? What happens last? **(16marks)**

QUESTION THREE (20 MARKS)
(a) Convert the following decimals to binary numbers. **(6 marks)**
   i)   90
   ii)   100
   iii)   70
(b) Convert the following from binary to hexadecimal. **(6 marks)**
   i)   101111011
   ii)   100011111
   iii)   101011101
(c) Convert the following from hexadecimal to decimal. **(6 marks)**
   i)   9FA
   ii)   E0AC
(d) Convert a decimal value 789 to binary form. **(2 marks)**
QUESTION FOUR (20 MARKS)
(a) Explain how each of the following computer programs work. **(3 marks)**
   i)   Word Processor program
   ii)   Spread Sheet program
   iii)   Presentation software

(b) Define what an operating system means? And give two examples of operating systems commonly used for personal or office use. **(3 marks)**

(c) An operating system coordinates the activity between the user and the computer. Explain various functions of operating system. **(14 marks)**

QUESTION FIVE (20 MARKS)

(a) Discuss the advantages that users experience when working with computer.
(6 marks)

(b) Discuss how society uses computers in education, finance, publishing and manufacturing. **(14 marks)**

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