MOI UNIVERSITY

OFFICE OF THE DEPUTY VICE CHANCELLOR
(ACADEMICS, RESEARCH, EXTENSION & STUDENT AFFAIRS)

UNIVERSITY EXAMINATIONS
2022/2023 ACADEMIC YEAR

SECOND YEAR EXAMINATION

FOR THE DEGREE OF

BACHELOR
OF
BUSINESS MANAGEMENT

COURSE CODE: BBM 210

COURSE TITLE: COMPUTER PROGRAMMING

DATE: WEDNESDAY-9TH AUGUST, 2023   **TIME:** 2.00 P.M. – 5.00P.M.

INSTRUCTION TO CANDIDATES

- SEE INSIDE.

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BBM 210 – COMPUTER PROGRAMMING

INSTRUCTIONS: Answer question one and any other three questions
SECTION A- QUESTION <u>ONE</u> IS COMPULSORY (30 MARKS)

Question One:
  a) Compare and Contrast Object Oriented Programming and Structured Programming languages (10 marks)
  b) Computer programming is the process of writing programs or software codes. Discuss the characteristics of a good program   (5 marks)
  c) By giving examples, describe categories of Computer programming languages, state their advantages and disadvantages.   (5 marks)
  d) Programming requires effective skills and competencies. Discuss qualities of a good programmer   (5 marks)
  e) Discuss the different tokens available in C programming language (5 marks)

SECTION B - ANSWER ANY TWO QUESTIONS (each Question carry 20 marks)
Question Two:
  a) Programs developed and implemented may not meet the demands of the users. Discuss the reasons that causes such problems in software design and development   (5 marks)
  b) What is a function? Differentiate between *System functions* and *User-defined functions* (5 marks)
  c) Briefly describe the following programming techniques and state their advantages; *Structured programming* and *Modular programming* techniques   (5 marks)
  d) Explain any FIVE data types supported by C programming and state how much storage/memory each requires.   (5 marks)

Question Three:

a) Define an algorithm, what is the importance of algorithms in program development? (4 marks)

b) Write an algorithm to find the largest number among three numbers (6 marks)

c) Write a C program to check whether a Number is Positive or Negative of Zero (10 marks)

Question Four:

a) How are decision control structures different from looping control structure? (5 marks)

b) Write a program to add and display the sum of two integers entered by a user (5 marks)

c) With the help of a flowchart and algorithm, write a corresponding program to compute the sum of digits which are even in any input integer number (10 marks)

Question Five:

a) Decision making structures require that the programmer specify one or more conditions to be evaluated or tested by the program. By use of flowcharts describe any TWO decision statements used in C programming (6 marks)

b) Using a program code, describe a nested *if-else* statements (4 marks)

c) Write a program to describe the use of *do...while* loop (4marks)

d) Discuss the importance of program documentation in programming (6marks)

Question Six:

a) Explain the use of the following functions: **printf( )** and **scanf( )** (4 marks)

b) Using a program, differentiate between a *String* and *an Array* (6 marks)

c) Show how Arrays are declare in C programming (5 marks)

d) Write a C program to read the name and the age of a student and to display them (5 marks)

###END###