MERU UNIVERSITY OF SCIENCE AND TECHNOLOGY

UNIVERSITY EXAMINATIONS 2023/2024

FIRST YEAR, SECOND SEMESTER EXAMINATION FOR CERTIFICATE IN
INFORMATION TECHNOLOGY
AND
SECOND YEAR, FIRST SEMESTER EXAMINATION FOR CERTIFICATE IN
INFORMATION TECHNOLOGY

CIT 1212: STRUCTURED PROGRAMMING

DATE: DECEMBER 2024   **TIME: 1½ HOURS**

INSTRUCTIONS: Answer Question ONE and any other TWO questions.

QUESTION ONE (30 MARKS)

1. a. What is the meaning of the following terms?

    i.   Computer program.   (1Mark)

    ii.   Syntax   (1Mark)

    iii.   Programming.   (1Mark)

    iv.   Machine language.   (1Mark)

    v.   Compiler.   (1Mark)

    b. Why is the Design phase important in Program Development Life Cycle?   (3 Marks)

    c. What is syntax error in programming   (2 Marks)

2. a. List 4 characteristics of high-level programming languages.   (4 Marks)

    b. Outline 3 advantages of using a flow chart in program development   (4 Marks)

c.Regarding programming, distinguish between Source program and Object code.

(2 Marks)

3. a. explain the three major program development approaches used in PDLC   (6 Marks)

b. Show the difference between Machine language and Assembly language.   (4 Marks)

QUESTION TWO (15 MARKS)

a) What is the difference between Functional programming and Modular Programming

(4 Marks)

b) List and explain 3 differences between a compiler and interpreter in programming

(6 Marks)

c) Give two advantages & three disadvantages of Machine language programming (5 Marks)

QUESTION THREE (15 MARKS)

a) Explain three types of feasibility during program analysis   (5 Marks)

b) Write an algorithm to input 5 NUMBERS and calcite sum and average.   (5 Marks)

c) Explain any five programming errors that can occur during coding   (5 Marks)

QUESTION FOUR (15 MARKS)

a) Discuss the functions of the following in computer programming

i.   Assemblers   (2 Marks)

ii.   Interpreters   (2 Marks)

iii.   Compilers   (2 Marks)

b) Draw a flow chart that will represent a program for imputing 5 integers and find sum and average   (6 Marks)

c) Explain three rules when developing- a flowchart   (3 Marks)