TECHNICAL UNIVERSITY OF MOMBASA

INSTITUTE OF COMPUTING AND INFORMATICS

DEPARTMENT OF COMPUTER SCIENCE &

INFORMATION TECHNOLOGY

UNIVERSITY EXAMINATION FOR:

DIPLOMA IN INFORMATION & CCOMMINICATION

TECHNOLOGY

ECS 2103: PROGRAMMING METHODOLOGY

END OF SEMESTER EXAMINATION

SERIES:AUGUST2019

TIME:2HOURS

DATE: Pick DateSelect MonthPick Year

Instructions to Candidates

-You should have the following for this examination

-Answer Booklet, examination pass and student ID

This paper consists of **FIVE** questions. Attemptany THREE questions.

Do not write on the question paper.

Question ONE

(a) Explain the following terms as used in computer programming.

i) Debugging
ii) Translator
iii) Program
iv) Assembler

(8 marks)

b) Explain the following levels of programming languages.

i) Assembly programming language

(6 marks)

ii) Object oriented programming language

(6 marks)

Question TWO

(a) Explain the advantages of program flowchart as program design tools.

(6 marks)

b) Develop a program Pseudocode to read the names and scores for ten students. It should calculate and report the grade average.

(6 marks)

c).) Explain the term looping control structures.

(4 marks)

d) state four types of programming error

(4 marks)

Question THREE

(a)) Explain the following programming techniques

i) Modular programming
ii) Event driven programming
iii) Web programming
iv) Visual programming

(8 marks)

(b)) Explain any five logical operators

(10 marks)

c) State the importance of program hierarchy chart

(2 marks)

Question FOUR

(a)) Develop a C program to read the name and score of a student. The program should calculate the status given the following. If score is equal to or greater than 50 then status is "PASS" otherwise "FAIL".

(10 marks)

(b) Explain the term Array as used in programming

(2 marks)

c) Explain any four characteristic of arrays

(8 marks)

Question FIVE

(a) Write a C Program to read TEN Integer Values, then display the THIRD Largest element. Use a loop.

(10 marks)

(b)) Explain any five arithmetic operators

(10 marks)