



(Knowledge for Development)

KIBABII UNIVERSITY COLLEGE

**A CONSTITUENT COLLEGE OF
MASINDE MULIRO UNIVERSITY OF
SCIENCE AND TECHNOLOGY**

UNIVERSITY EXAMINATIONS

2014/2015 ACADEMIC YEAR

FOURTH YEAR SECOND SEMESTER

MAIN EXAMINATION

FOR THE DEGREE OF BSC COMPUTER SCIENCE

COURSE CODE: CSC 464E

COURSE TITLE: PROGRAMMING LANGUAGES

DATE: 27TH APRIL, 2015

TIME: 8.00AM-10.00AM

INSTRUCTIONS TO CANDIDATES

Answer Question One in Section A and Any other **TWO** (2) Questions in Section B

TIME: 2 Hours

SECTION A (24 marks): Answer ALL questions.

Question one

- a) What Innovations were seen in FORTRAN programming language? [5 marks]
- b) At what stage do require to compile a program? [3 marks]
- c) Define a computer language? [2marks]
- d) Illustrate the three selection and repetition structures provided by Java. [3 marks]
- e) How can you evaluate programming technologies? [3 marks]
- f) Give the function of a scanner in a compiler structure? [3 marks]
- g) What attributes must be found in a programming language to allow compilation? [3 marks]
- h) Distinguish between a compiler and an interpreter. [2 marks]
- i) What are the Major C++ design goals? [6 marks]

SECTION B (30 marks): Answer ANY two questions.

Question two

- a) What is Pure Machine Code? [3 marks]
- b) Although assembly languages greatly improved programming efficiency, what was its drawback? [3 marks]
- c) State and explain any five Programming Language Paradigms. [5 marks]
- d) Give reasons as to why we still need compilers for our programs? [4 marks]

Question three

- a) What is pseudo code? [4 marks]
- b) What is Augmented Machine Code [3 marks]
- c) Write a c++ Program to add two integers giving sufficient declaration and libraries required. [8 marks]

Question four

- a) Virtual Machine Code [3 marks]
- b) What are the common characteristics of scripting languages? [7 marks]
- c) Write a Pseudocode algorithm that uses counter-controlled repetition to solve the class-average problem of your choice. [5 marks]

Question five

- a) What is firmware? [3 marks]
- b) What are the problems encountered in modern computing platforms? [6 marks]
- c) What constitute language design mechanisms in line with Control? [6 marks]