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KIRIRI WOMENS' UNIVERSITY OF SCIENCE AND TECHNOLOGY

UNIVERSITY EXAMINATION, 2022/2023 ACADEMIC YEAR SECOND YEAR, FIRST SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE COMPUTER SCIENCE

Date: 19th April, 2022 Time: 2.30pm –4.30pm

KCS 200 - OBJECT ORIENTED PROGRAMMING 11

INSTRUCTIONS TO CANDIDATES

ANSWER QUESTION ONE (COMPULSORY) AND ANY OTHER TWO

OUESTION ONE COMPULSORY (30 MARKS)

- a) Briefly generate the guidelines for naming variables in C++ language (4 marks)
- **b)** Describe the basic building blocks of the C ++programming language (8 marks)
- c) Using a class, write a program in C++ to find the area and perimeter of a circle (8 marks)
- d) The types in C++ can be classified a number of ways. Describe any five such types

(10 marks)

OUESTION TWO (20 MARKS)

- a) Briefly explain any five operators used in C ++ (10 marks)
- b) Write a C++ to demonstrate operator overloading (5 marks)
- c) Generate the reserved keywords in C programming (5 marks)

OUESTION THREE (20 MARKS)

- a) Demonstrate the use and the syntax of loop and selection control structures in C++programming (10 marks)
- b) What is a class? Explain the declaration and in
- c) itialization of a with example.

(10 marks)

OUESTION FOUR (20 MARKS)

a) Explain the concept of inheritance and its types.

(10 marks)

b) Discuss the benefits associated with object oriented programming

(10 marks)

OUESTION FIVE (20 MARKS)

- a) Write a program in C ++ to print the numbers from 4 to 9 and their squares (8 marks)
- b) C++ is a widely used professional language for various reasons. Explain the reasons.

(6 marks

c) What is polymorphism? Explain different types of polymorphism in C++ programming

(6 marks)