



MACHAKOS UNIVERSITY COLLEGE

(A Constituent College of Kenyatta University)
University Examinations for 2015/2016 Academic Year

SCHOOL OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF COMPUTING AND INFORMATION TECHNOLOGY

FIRST SEMESTER EXAMINATION FOR DEGREE IN BACHELOR OF SCIENCE IN COMPUTER SCIENCE

SCO 200: OBJECT ORIENTED PROGRAMMING II

Date: 1/8/2016

Time: 8:30 – 10:30 AM

INSTRUCTIONS

Attempt Question ONE and ANY other TWO

QUESTION ONE:

- a) Explain the uses of break statements in C++ programming (3 marks)
- b) Explain what is made by multiple inheritance in OOP (4 marks)
- c) Define data abstraction as it's in OOP (2 marks)
- d) List any FOUR features of object oriented programs (4 marks)
- e) Define the words 'Class' and 'Object', and explain the relationship between them. (4 marks)
- f) Explain the concept of 'encapsulation' in the context of Object Oriented programming. (3 marks)

QUESTION TWO:

- a) Discuss the TWO different ways of argument Passing in functions (6 marks)
- b) Define what is made by local classes in OOP and illustrate using an example how it is implemented (10 marks)

- c) Define the term array and write a statement that declares and initializes an array to store the marks of five students. (4 marks)

QUESTION THREE:

- a) List and explain the iteration statements used in OOP and write the syntax on how they are implemented (10 marks)
- b) As a programmer highlight on the four advantages of choosing object oriented programming compared to other programming concepts (8 marks)
- c) Explain what is meant by a 'class diagram', and provide an example (2 marks)

QUESTION FOUR:

- a) Using any OOP language write down the syntax of switch statement (8 marks)
- b) Explain any FOUR Visibility Controls / levels used in object oriented programming (8 marks)
- c) Re-use is an important element in software development. Discuss the feature(s) of C++ that enhance the reusability of classes and objects. (4 marks)

QUESTION FIVE:

- a) With an example, describe the general structure in which a class is specified in OOP (10 marks)
- b) The smallest individual units in a program are known as tokens. Discuss any FIVE C++ tokens applicable in programming (10 marks)