TECHNICAL UNIVERISTY OF MOMBASA

Faculty of Engineering & Technology

DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY

UNIVERSITY EXAMINATION FOR BACHELOR OF SCIENCE IN
INFORMATION TECHNOLOGY
(BSIT S12/FT)

ICS 2104: OBJECT ORIENTED PROGRAMMING I

END OF SEMESTER EXAMINATION
SERIES: APRIL 2013
TIME: 2 HOURS

Instructions to Candidates:
You should have the following for this examination
- *Answer Booklet*

This paper consists of **FIVE** questions. Attempt question **ONE** and any other **TWO** questions
Maximum marks for each part of a question are as shown
This paper consists of **TWO** printed pages

Question One (Compulsory)

a) Briefly explain the following terms as used in object oriented program:
   (i) Overriding
   (ii) Overloading   **(4 marks)**

b) Using an appropriate example, explain the following concepts as used in object oriented programming:
   (i) Access modifier
   (ii) Constructor   **(6 marks)**

c) Briefly state the **TWO** forms of putting comments in C++ programming.   **(4 marks)**

d) Write shorts statement in C++ to distinguish the following concepts as used in C++:
   (i) Preprossor directive
   (ii) Function definition
   (iii) Constant declaration   **(6 marks)**

e) Distinguish between the following type of statements as used in C++ programming:
  (i) DO.. while and while statements
  (ii) If.. else and switch statements.   **(4 marks)**
f) State any THREE features of C++ language.   **(6 marks)**

Question Two

a) Write an object oriented program that:
  (i) Has three integer variable (a.c)
  (ii) Initialize them with values accepted as input
  (iii) Finds the largest values of the 2 values
  (iv) Displays the largest value with a message "this is the largest value"   **(10 marks)**

b) Briefly explain the meaning of the following object in C++:
  (i) Float
  (ii) Iostream
  (iii) Main
  (iv) Void
  (v) #include   **(10 marks)**

Question Three

a) Write the output of each of the following statement:
  (i) CC2==3) 88 –(2==2).
  (ii) Cout<< "hellow" <<" world"<<" again
  (iii) Cout <<a<<b<<c,
  (iv) Cout<<a<,""""<<b<<""""<<c,
  (v) Cout<<"x lnxx $\backslash nxx \backslash nxxx \backslash nxxxxx \backslash n$ **(10 marks)**

b) Write an object oriented program that input three different integers and does the following:
  (i) Displays the 3 integers
  (ii) Determines the largest
  (iii) Displays the largest   **(10 marks)**

Question Four

a) Write the meaning of the following symbols in C++:
  (i) {
  (ii) - -
  (iii) : :
  (iv) ! =
  (v) #   **(10 marks)**

b) Write object oriented program that:
  (i) Accepts a number between 1 and 7 as input
  (ii) Display the name of the week day corresponding to the number.   **(10 marks)**

Question Five

Write an object oriented program that:

  (i) Has a class called circle whose data member is radius and pi, method member are
      constructor = set size () and calculate area ()
  (ii) Accepts radius and as input

(iii)   Displays the area of the circle   **(20 marks)**