Sixth Semester B.E. Degree Examination, May/June 2010
Object Oriented Programming using C++

Time: 3 hrs.   Max. Marks:100

Note: *Answer any FIVE full questions,*
selecting at least TWO questions from each part.

PART – A

1   a. Distinguish between procedure oriented programming and object oriented programming.
(06 Marks)
   b. Enumerate the main features of OOP.
(06 Marks)
   c. Define the following, give an example for each.
   i) Tokes   ii) keywords   iii) identifiers   iv) variables.
(08 Marks)

2   a. Find errors, if any, in the following C++ statements and write correct statements.
   i) if x < y min = x
      else min = y ;
   ii) # include <iostream> ;
      using namespace standard :
      int main
      { // prints "Hello, world!" :
          cout << "Hello, world!\n"
          return 0 ;
      }
(06 Marks)
   b. What are user defined data types? Discuss each data type with its general form.   **(08 Marks)**
   c. Write a C++ program to input an integer value from the keyboard and display on screen "WELL DONE" that many times.
(06 Marks)

3   a. What is an inline function? State the general form of the inline function, explain inline function, with an example. Discuss the situations, where, inline functions many not work.
(10 Marks)
   b. Find permutation of k items taken from a set of n items. Permutation equation is $P(n, k) = n!/(n - k)!$. Write a function called fact( ) to find factorial and use the same to find permutation.
(10 Marks)

4   a. What is a class? How does class accomplish data hiding? Give general form of a class, definition of the member functions defined in the class and creation of an object.   **(08 Marks)**
   b. Create a class with member functions that read two integers, find largest among them and display the largest integer. Write a main program to test the class.   **(08 Marks)**
   c. What is a static member function? How the static member functions can be accessed within the main function?
(04 Marks)

PART - B

5   a. What is a constructor? How to declare a constructor in a class and create an object using the constructor?
(06 Marks)
   b. Mention the special characteristics of the constructor functions.   **(06 Marks)**
   c. Explain the copy constructor, with an example.   **(08 Marks)**