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**Third Semester B.E. Degree Examination, January 2013**  
**Object Oriented Programming with C++**

Time: 3 hrs.

Max. Marks:100

**Note: Answer FIVE full questions, selecting  
atleast TWO questions from each part.**

**PART – A**

- 1 a. Explain the following OOP features : (08 Marks)  
 i) Class ii) Encapsulation iii) Polymorphism iv) Inheritance.
- b. Define inline function. Explain with an example program. What are the conditions, where inline functions can not be expanded? (06 Marks)
- c. Define function overloading. Demonstrate with C++ program. (06 Marks)
  
- 2 a. Write a C++ program to keep track of the number of objects created by a particular class without, using extern variable. (06 Marks)
- b. Determine the output for the following snippets and comment. (06 Marks)

```

i) class A
    { int x = 10 ;
      void display( )
      {
        cout <<“The value of x = ” <<x ;
      }
    };
void main( )
{
  A obj ;
  obj. display( );
}

```

```

ii) class A
    { int pvt ;
      Public ; int * ptr – pub ;
      A( ) {
        pvt = 25 ;
        pvt_pub = &pvt ;
      }
      void print_private( )
      {
        cont << pvt <<endl ;n
      }
    };
void main( )
{
  A objA ;
  * objA. ptr_pub = 10 ;
  objA. print_private( )
}

```

- c. Demonstrate with C++ program for (08 Marks)  
 i) Passing objects to functions    ii) Returning objects.

Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.  
2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8 = 50, will be treated as malpractice.