# B.Tech. IN COMPUTER SCIENCE AND ENGINEERING (BTCSVI)

## Term-End Examination

## June, 2012

01035

## BICS-003 : OBJECT ORIENTED PROGRAMMING

*Time : 3 hours*                    *Maximum Marks : 70*

*Note :* *Attempt* *any seven* *questions.*

1.  (a)  What is object oriented programming ?  6
        How it is different from the procedure
        oriented programming ?

    (b)  What is operator overloading ? Explain in  4
        detail.

2.  Explain the following terms with example :  10
    (a)  Encapsulation
    (b)  Information hiding
    (c)  Polymorphism
    (d)  Constructors

3.  (a)  What do you understand by object identity ?  5
        Explain with example.

    (b)  What is object oriented modelling ? What is  5
        it's importance ?

4. (a) What is a virtual function ? What is the use of virtual function ? 5

(b) Explain different types of Inheritance. 5

5. (a) Write a program to define a constructor and initialize the class data member variables with constants. 5

(b) Write a program to overload + binary operator. 5

6. Explain the evaluation of C++. Also write the advantage of object oriented programming languages. 10

7. (a) Write the statement for concatenation of two string using cout. write ( ) statement. 5

(b) What is dynamic initialization ? Is it possible in C ? 5

8. (a) How are friend functions and static functions invoked ? Explain with example. 5

(b) What are the concepts of data hiding ? What are the advantages of it's application ? 5

9. (a) What do you mean by inheritance ? What is the difference between private and protected inheritance ? 5

(b) Write a program to declare pointer to member variable and display the content of the variable. 5

**10.** Write short notes on *any two* of the followings :

    (a)    Virtual function              **2x5=10**

    (b)    Binding

    (c)    Destructors

———