BICS-003

B.Tech. – VIEP – COMPUTER SCIENCE AND ENGINEERING (BTCSVI)

Term-End Examination
December, 2017

00064

BICS-003 : OBJECT ORIENTED PROGRAMMING

Time : 3 hours   *Maximum Marks : 70*

Note : *Attempt any **seven** questions. All questions carry equal marks.*

1. Explain each of the following terms with the help of suitable example :   *10*

    (a)   Inheritance

    (b)   Abstraction and Encapsulation

    (c)   Polymorphism

    (d)   Virtual Function

    (e)   Constructor

2. (a)   Write a C++ program to overload the decrement operator with prefix and postfix norms.   *5*

    (b)   Explain any two types of inheritance supported in C++ with the help of suitable examples.   *5*

3. (a) Illustrate about how exceptions are handled using multiple catch handlers. *5*

(b) Write a class template to represent a queue of any possible data type. *5*

4. Write a C++ program to swap the value of three variables without using the temporary variable. *10*

5. Explain any *two* of the following : *10*

(a) Random Access File

(b) Unformatted Input/Output with Read and Write operation

(c) Sequential Access File

6. (a) When do you declare a member of a class static ? Justify your answer with a program. *5*

(b) How are friend functions and static functions invoked ? Explain with the help of suitable example. *5*

7. Describe the different mechanisms for accessing data members and member functions in class with the help of suitable example. *10*

8. (a) What is dynamic initialization ? Is it possible in C ? *5*

(b) What are inline functions ? Explain with the help of suitable example. *5*