BICS-003

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

00424   **Term-End Examination**

June, 2018

BICS-003 : OBJECT ORIENTED PROGRAMMING

Time : 3 hours   *Maximum Marks : 70*

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

1. (a)   What is object oriented programming ? Explain object with an example.   5

    (b)   Write a C++ program which will take three integers as input and find the largest among them.   5

2.   What is inheritance ? What are its advantages ? Explain different types of inheritance in C++ programming, with suitable examples.   10

3. (a)   What is public access specifier ? How is it different from private access specifier ? Explain briefly with an example.   5

    (b)   What is virtual function ? Explain with an example.   5

4. Write a C++ program to overload "+" operator to perform addition of two complex numbers.   *10*

5. (a) What is a constructor ? Explain parameterized constructors with example.   *5*

   (b) What is friend function in C++ ? Explain with the help of a program.   *5*

6. Write a C++ program to create Account Class. Derive Saving_Account class and Current_Account class from Account class. Define proper constructors for all the three classes. Also define the method to display account balance in Saving_Account class and Current_Account class.   *10*

7. (a) What is encapsulation ? Why is it important in C++ ?   *5*

   (b) Write a C++ program to find the factorial of a given number.   *5*

8. (a) What is an exception ? Explain how an exception is handled in C++ with the help of an example program.   *7*

   (b) Explain static class in C++.   *3*

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