CS-72

BACHELOR IN COMPUTER APPLICATIONS

01042

Term-End Examination

June, 2011

CS-72 : C++ AND OBJECT ORIENTED PROGRAMMING

Time : 2 hours   *Maximum Marks : 60*

Note :   *Question number 1 is **compulsory**. Answer **any three** Questions from the rest.*

1. (a) Define a class ACCOUNT that includes **10** following members :

    Data Members : Name of Depositor, Account no., Type of A/c, Balance Amount.

    Member functions : To assign initial values, deposit amount, withdraw after checking balance, To display name and balance.

    Write a program in C++ and test it for 10 Customers.

    (b) Differentiate between :   **10**

    (i) Procedural Programming and Object Oriented Programming.

    (ii) Data Encapsulation and Inheritance.

    (c) Explain the utility of the friend function, **5** using an appropriate example.

(d) Explain the steps involved in drawing interaction diagram with the help of an example. **5**

2. (a) What do you mean by exception Handling ? Write a C++ Program that throws an arithmetic exception whenever the Input number is less than zero. **6**

(b) What do you mean by Polymorphism ? Explain with an example. **4**

3. (a) How do you use scope resolution operator for accessing global variables ? Also discuss its other uses. **5**

(b) What is a Virtual Base Class ? Explain with an example. **5**

4. (a) What is an inline function ? Explain with an example and also discuss its limitations. **5**

(b) Define operator overloading. Explain its advantages. **5**

5. Explain the following with examples : **2x5=10**
   (a) Input and Output streams
   (b) Constructor and Destructor
   (c) Abstract classes
   (d) Preprocessor directives