

## BACHELOR IN COMPUTER APPLICATIONS

### Term-End Examination

June, 2008

### CS-72 : C++ AND OBJECT ORIENTED PROGRAMMING

Time : 2 hours

Maximum Marks : 60

**Note :**

- (i) Question number 1 is **compulsory**.
- (ii) Attempt any **three** questions from the rest.

- 
1. (a) State whether the following are true or false : 5
- (i) The object oriented programming cannot be used for client server application.
  - (ii) The kernel of LINUX operating system is implemented in C++.
  - (iii) One of the advantages of object oriented database management system is that it reduces development cost.
  - (iv) Object Oriented Programming C++ is slower than procedural programming.
  - (v) Error handling cannot be done in object oriented programming.
- (b) Write a program that accepts two strings as argument and reports whether the first string is part of second or not. In case first string occurs multiple times in second string, it reports the number of times it occurs in second. 10

- (c) Differentiate between dynamic loading and late binding. 5
- (d) What are various visibility modes in C++ ? Explain each of them with suitable examples. 5
- (e) Differentiate between class diagram and interaction diagram. Also list their applications. 5
2. (a) Write a C++ program to accept a 5 digit number and report whether it is divisible by 3, 5, 7, 9 or not. 4
- (b) Define the following : 6
- (i) Operator overloading
  - (ii) Function overloading
  - (iii) Friend function
3. (a) What is UML ? List primary goals of UML. Why do we use UML ? 5
- (b) Differentiate between modular programming and object oriented programming. 5
4. (a) What is meant by exception handling ? Write a C++ program that throws an arithmetic exception whenever the result of arithmetic computation becomes odd. 6
- (b) Explain the concept of polymorphism with the help of suitable example. 4

5. Define the following :

10

- (i) Activity diagram
- (ii) Python
- (iii) Source code reuse
- (iv) Macros
- (v) Comma operator in C++