

BACHELOR IN COMPUTER APPLICATIONS

Term-End Examination

June, 2010

00579

CC-16 : INTRODUCTION TO C++

Time : 2 hours

Maximum Marks : 75

Note : Question number 1 is compulsory. Answer any three questions from the rest. Use C++ wherever necessary.

1. (a) Create a class "My string". Write the following methods in this class to perform the actions mentioned : 8
- (i) Reverse () : To display the reverse of the given input string.
 - (ii) String Len () : To display the length of the given string.
- (b) Write a program in C++, using recursion to find the factorial of a given number. Your program should also provide the standard checks on input like number should not be negative. 8
- (c) Write the syntax of the following in C++ and give an example for each : 9
- (i) Do.. While
 - (ii) GoTo
 - (iii) BREAK.
- (d) What are nested classes ? Explain with an example. 5

2. (a) Write a program in C++ to illustrate the multiple inheritance concept. 7
(b) How is exception handling performed in C++ ? Write a program-segment that throws an arithmetic exception as and when an input number is greater than 9999. 8
3. (a) Write a program in C++ to count the occurrences of each vowel in a given string. 6
(b) With the help of a suitable example for each, explain the visibility modes (private, public and protected). 9
4. (a) Write a program in C++ to add two matrices. 7
(b) Explain the concepts of function overloading and operator overloading with the help of an example. 8
5. Explain the following with their usage in C++ programming : 5x3=15
(a) Friend function
(b) Arithmetic If operator
(c) Size of operator
(d) Scope resolution operator
(e) Abstract class
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