

ADIT/BIT PROGRAMME

Term-End Examination  
June, 2010

CST-102 : COMPUTING : AN OBJECT ORIENTED  
APPROACH

Time : 2 hours

Maximum Marks : 50

*Note :* There are two sections in this paper, section A and B.  
All questions in Section-A are compulsory. Question  
No. 1 to 10 carry one mark each. Question No. 11 to 14  
carry 4 marks each. Answer any two questions from  
Section-B. Each question of Section-B carries 12 marks.  
Use C++ wherever necessary.

SECTION - A

1. C++ is \_\_\_\_\_ : 1
- (a) Object Oriented Programming Language
  - (b) Procedure Oriented Programming Language
  - (c) Assembly Language
  - (d) Machine Language

2. In C++, functions contained within a class are called \_\_\_\_\_. **1**
- (a) Inline function
  - (b) Member function
  - (c) Friend function
  - (d) All of the above
3. Specify how many bytes are occupied by long double data type in C++. **1**
- (a) 1
  - (b) 2
  - (c) 3
  - (d) none of the above
4. In a C++ program, expression  $11\% 3$  and  $11/3$  evaluates to \_\_\_\_\_. **1**
- (a) 3 and 3
  - (b) 3 and 2
  - (c) 2 and 2
  - (d) 2 and 3
5. Wrapping up of data and function into a single unit is known as \_\_\_\_\_. **1**
- (a) Encapsulation
  - (b) Abstraction
  - (c) Polymorphism
  - (d) None of the above

6. The library function `exit ( )` cause an exit from \_\_\_\_\_ 1
- (a) loop in which it occurs
  - (b) program in which it occurs
  - (c) function in which it occurs
  - (d) none of the above
7. By default, member functions and data in classes are \_\_\_\_\_ 1
- (a) protected      (b) public
  - (c) private      (d) none of the above
8. If you try to access array element '0' in a 10 element array, the compiler will : 1
- (a) raise error
  - (b) no problem in execution
  - (c) crash the system
  - (d) none of the above
9. To convert from a basic type to a user defined class, you would most likely use : 1
- (a) a built in conversion function
  - (b) an overloaded = operator
  - (c) one argument constructor
  - (d) none of the above

10. The new operator \_\_\_\_\_ 1
- (a) returns a pointer to a variable and obtains memory for a new variable
  - (b) creates a variable new
  - (c) tell how much memory is available
  - (d) none of the above
11. What do you mean by virtual function ? How is it different from pure virtual function ? 4
12. What do you mean by term "Command line" programming ? How is its main function different from others ? Can we do it in C++ ? What is the utility of such programming style ? 4
13. Compare and contrast (*any two*) : 4
- (a) Overloading and overriding
  - (b) Structure and Class
  - (c) Structure and Union
14. With the help of a suitable program in C++, demonstrate the concept of constructor overloading. 4

## SECTION - B

Answer *any two* questions from the following :

15. Explain any six key words of C++. 12
  
  16. What is a Template ? Define a template for any class make necessary assumption. 12
  
  17. Write a program in C++ to overload the binary operator + and use it to add two complex numbers. 12
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