

**STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI 600 086**  
**(For candidates admitted during the academic year 2010 – 11)**

**SUBJECT CODE: BI/PC/CP14**

**M. Sc. DEGREE EXAMINATION, NOVEMBER 2010**  
**BIOINFORMATICS**  
**FIRST SEMESTER**

**COURSE : CORE**

**PAPER : COMPUTER PROGRAMMING: C++**

**TIME : 90 MINUTES**

**MAX. MARKS: 50**

**SECTION – A**

**ANSWER ALL QUESTIONS.**

**(30 x 1=30)**

1. Single line comment in C++ is given using\_\_\_\_\_.  
a) ' b) /\* c) // d) All of these
2. A \_\_\_\_\_ variable is one declared within the body of a function or a block.  
a) Local b) global c) constant d) None of these
3. Escape code for newline in C++ is\_\_\_\_\_.  
a) //n b) \n c) \t d) None of these
4. \_\_\_\_\_ members are accessible from anywhere where the object is visible  
a) private b) protected c) friend d) public
5. \_\_\_\_\_ operator is used to define a member of a class from outside the class definition itself.  
a) . b) : c) :: d) ~
6. When a class inherits from another one, the member of the derived class can access the \_\_\_\_\_ members inherited from the base class, but not its\_\_\_\_\_ members.  
a) Private, public b) private, protected c) protected, private d) none of these
7. The code under exception handling is enclosed in \_\_\_\_\_ block.  
a) Try b) catch c) throw d) any of these
8. The result of a relational operation is a \_\_\_\_\_ data type.  
a) Float b) string c) Boolean d) none of these
9. \_\_\_\_\_ operator is called as insertion operator.  
a) << b) >> c) :: d) !=
10. \_\_\_\_\_ loop grants at least one execution of statement even if condition is never fulfilled.  
a) While b) do...while c) for d) if

**FILL IN THE BLANKS**

11. The syntax for declaration of variable is\_\_\_\_\_.
12. The syntax for declaring a constant is \_\_\_\_\_.
13. \_\_\_\_\_ is a series of elements of the same data type.
14. \_\_\_\_\_ is an instance of class.
15. \_\_\_\_\_ is automatically called whenever a new object of this class is created.
16. Stream class to both read and write from/to files is \_\_\_\_\_.
17. To append to the end of the file, file should be opened in\_\_\_\_\_mode.
18. If the file open for reading reaches the end, eof()returns \_\_\_\_\_.
19. \_\_\_\_\_ operator is known as reference operator.
20. The syntax of declaring a variable of pointer type is \_\_\_\_\_.

**SAY TRUE OR FALSE**

21. Static binding means that the code associated with a given procedure call is not the known until the time of the call at run-time.
22. Virtual functions are member functions of a class.
23. Preprocessor directives should end with a semicolon.
24. Destructors should not return any value.
25. Virtual function is a mechanism to implement the concept of polymorphism.
26. Assembly language is a system of instructions and data executed directly by a computer's CPU.
27. Procedural programming does not model real world problems very well.
28. In OOP, emphasis is on procedure rather than data.
29. In the statement fruit mango, fruit mango, fruit is an object and mango is a class.
30. C++ was developed by Dennis Rictchie.

**SECTION – B**

**ANSWER ANY TWO QUESTIONS. EACH ANSWER SHOULD NOT EXCEED 500 WORDS. (2x 10 = 20)**

31. List out the basic concepts of Object Oriented programming and explain any five of them.
32. What are constructors? Explain with an appropriate example.
33. Write short notes on a) Command line arguments b) Pointers to objects.
34. What is Operator Overloading? Explain string manipulation in detail.

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**SECTION – A**

**ANSWER ALL QUESTIONS.**

**(30 x 1=30)**

1. Write a program in C++ to find the sum of digits of any given number. (25)
2. Create a class called student which contains the data members dept\_no, name, Mark1, Mark2, Mark3, Total and Average. Get the inputs of dept\_no, name, Mark1, Mark2, Mark3 from the user using a member function **Inp**, Calculate the Total and Average and display the details using another member function **Disp**. Use a constructor to initialize the data members. (25)