



Reg. No. :

Name :

**III Semester B.A./B.Sc./B.Com./B.B.A./B.B.A. T.T.M./B.B.M./B.C.A./B.S.W.
Degree (CCSS – Reg./Supple.) Examination, November 2011
CORE COURSE IN COMPUTER SCIENCE
3B03 CSC – Programming in C++.**

Time: 3 Hours

Max. Weighted Grade Point : 84

SECTION – A

Answer **all** questions. Weightage for a bunch of **four** questions is **1**, Maximum Weighted Grade Point $1(W) \times 2(\text{bunch}) \times 4(\text{Max GP}) = 8$.

- 1) A function body is determined by
 - a) parentheses
 - b) braces
 - c) parameter
 - d) semicolon
- 2) Normally an integer variable occupy _____ no. of bytes in memory.
 - a) 1 byte
 - b) 2 bytes
 - c) 3 bytes
 - d) 4 bytes
- 3) Write a statement that gets a numerical value from keyboard and places it in the variable temp.
 - a) `cin >> temp`
 - b) `cin << temp`
 - c) `temp >> cin`
 - d) `temp << cin`
- 4) A relational operator
 - a) assign one operand to another
 - b) assign multiple operand to a variable
 - c) compare two operands
 - d) logically combines two operands
- 5) The library function `exit ()` causes an exit from
 - a) the loop in which it occurs
 - b) the block in which it occurs
 - c) the function in which it occurs
 - d) the program in which it occurs
- 6) When accessing a structure member, the identifier to the left of the dot operator is the name of
 - a) a structure member
 - b) a structure tag
 - c) a structure variable
 - d) the keyword `struct`.

P.T.O.



- 7) In a class declaration data or function designated private are accessible
- a) to any function in the program
 - b) only if you know the password
 - c) to member functions of that class
 - d) only to public members of the class
- 8) To write data that contains variable of type float to an object of type ofstream we should use
- a) the insertion operator
 - b) seekg()
 - c) write()
 - d) put()

SECTION – B

Answer **any 5** questions. Weightage **1 each**, Maximum Weightage Grade Point $1(W) \times 5(Qn.) \times 4(Max\ GP = 20)$.

- 9. Write the advantages of object oriented language.
- 10. Explain the use of # include.
- 11. Explain the use of tag name in structure.
- 12. What is a destructor ?
- 13. Explain the advantage of pointers.
- 14. Explain operator overloading.
- 15. Explain inheritance.
- 16. Explain nesting of member functions.

SECTION – C

Answer **any 5** questions. Weightage **2 each**, Maximum Weightage Grade Point $2(W) \times 5(Qn.) \times 4(Max\ GP = 40)$.

- 17. Explain in details the various conditional expressions that are being used with examples.
- 18. Write an object oriented program to find out second largest of N numbers.
- 19. Explain the following function with suitable examples : cin(); cout(); getline(); get().
- 20. Give an account of the various derived data types.



21. Explain constructor and destructor of object. How is static and dynamic memory allocation done ?
22. Describe the importance of friend function. How it is different from member function ?
23. Explain the following terms :
 - i) Function prototype
 - ii) Include function
 - iii) Default argument
 - iv) Function overloading.
24. What is copy constructor ? Illustrate overloading of constructors with suitable examples.

SECTION – D

Answer **any one** questions. Weightage 4. Maximum Weightage Grade Point $4(W) \times 1(Qn.) \times 4(Max GP = 16)$.

25. Create two classes DM and DB which store the value of distances. DM stores distance in meters and centimeters and DB stores in feet and inches. Write a program that can read values for the class object and add one object of DM with another object of DB.

Use a friend function to carry out the addition operation. The object that stores the results may be a DM object or DB object depending on the units in which the results are required.

The display should be in the format of feet and inches or meters and centimeters depending on the object on display.

26. Explain the basic concepts of object oriented programming and its benefits.
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