DON BOSCO COLLEGE

(Affiliated to the University of Calicut)

Mannuthy, Thrissur 680 651, Tel: 0487 - 2373730, 2371337, 2370447
E-mail: dbciqacmty@gmail.com , dbctrichur@gmail.com, iqac@dbcollegemannuthy.edu.in
www.dbcollegemannuthy.edu.in,

SECOND INTERNAL EXAMINATION MARCH 2016
SECOND SEMESTER B.Sc. CS
BCS2B02: OOP CONCEPTS & DATA STRUCTURES USING C++

Time: 3 hours   **Max. Marks: 80**

Part – A
Answer All Questions
Each Carries 1 Mark

1. C++ is originally developed by _____

2. A destructor takes --------arguments.

3. The ---------operator in C++ used to allocates memory for the object.

4. The operator << is called an _____operator.

5. A destructor takes _____arguments.

6. A linear list in which the last node points to the first node is _____

7. The order left->right->root is defined for _____ traversal of nodes in a tree.

8. The fields in a class of a C++ program are by default.
   (a)protected   (b)public
   (c)private   (d)none of these

9. Using pointers to call a function is called as
   (a)call by value   (b)call by reference
   (c)call by address   (d)all the above

10. The variables that can be used only within the function is
    (a)global variables   (b)local variables
    (c)both a&b   (d)none

(10 * 1 = 10 marks)

Part - B

Answer all questions.
Each question carries 3 marks.

1. Write short note on new and delete operators.
2. Define binary tree.
3. State the use of malloc() and calloc().

4. Define static variable in c programming.
5. When is a stack said to be in overflow?

(5 * 3 = 15 marks)

Part –C

Answer any five questions.
Each question curries 5 marks.

11. Define BST with example
12. What is function overloading? Illustrate with example.
13. Explain the unary operator overloading with example.
14. Write a program to search an element in a 2 dimensional array
15. Write the C++ code to implement array sorting.
16. Write the C++ program to perform stack operations using array.

(5 * 5 = 25 marks)

Part-D

Answer any three questions.
Each question carries 10 marks.

17. Write a short note on static member functions and const member function
18. What is a stack? Explain sack operations with algorithm.
19. Give detailed account of inheritance with suitable examples.
20. Explain file processing with suitable example.

(3 x 10 = 30 marks)

****