5402

Register Number:
Name of the Candidate:

B.Sc. DEGREE EXAMINATION, May 2015

(INFORMATION TECHNOLOGY)

(FIRST YEAR)

(PART-III)

160/150: PROGRAMMING IN C AND C++

(Common with B.C.A)

Time: Three hours   Maximum: 100 marks

| **SECTION-A** | **(8×5=40)** |

Answer any EIGHT questions

1. Explain the bit-wise and special operators in C language.
2. What is a structure? Explain, with an example how structure is declared and initialized.
3. Briefly compare the features of objected oriented programming with procedure oriented programming.
4. Illustrate with an example , passing of object as function argument.
5. Explain overloaded constructor with an example.
6. What is a friend function and what are the uses of friend functions?
7. Explain hybrid inheritance with suitable example.
8. Briefly explain the significance of the keywords public, private and protected while inheritance.
9. Illustrate how class objects can be written to and read from the disk file.
10. Explain various functions for manipulations of file pointers.

| **SECTION-B** | **(3×20=60)** |

Answer any THREE questions

11. a) What is a pointer and what are the advantages of pointer? How pointers are declared and initialized?
    b) What is recursion? Write a recursion function to find the factorial of a number.
12. a) What is a class and how does it accomplish data hiding? Give the general structure of a class and explain.
    b)   With suitable example, explain how objects are returned from a function.
13. With example explain conversion from

    a) basic type of class type and   b) class type to basic type
14. a) Illustrate the uses of virtual function with an example.

    b) Describe abstract class, base class and derived class each with examples.
15. Write a C++ program to merge the content of two text file in to a single file using command line arguments.

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