

ANNA UNIVERSITY OF TECHNOLOGY, COIMBATORE
B.E. / B.TECH. DEGREE EXAMINATIONS : NOV / DEC 2011
REGULATIONS : 2008
THIRD SEMESTER
080230004 - OBJECT ORIENTED PROGRAMMING
(COMMON TO CSE / IT)

Time: 3 Hours

Max.Marks: 100

PART - A

(10 x 2 = 20 Marks)

ANSWER ALL QUESTIONS

1. List the different phases of C++ program execution.
2. What is an abstract class? Mention its use.
3. What is a constructor? What is its role?
4. Distinguish between function overload and function templates.
5. Compare private and public access specifiers in a class.
6. What is this pointer? How is it available to member functions of a class?
7. Can a parameter of a copy constructor be passed by value? Justify your answer.
8. What is the role of templates?
9. When do you derive base class as virtual?
10. Explain down casting.

PART - B

(5 x 16 = 80 Marks)

ANSWER ALL QUESTIONS

11. a. Explain the declaration of a class in C++. How will you define the member functions of a class? Explain.
(OR)
b. Define a class string with appropriate constructors, destructor and overload +, =, and == operators use them in a main driver program.

12. a. Create a class complex to represent complex number with overloaded addition and multiplication operators. Use them in a main program.
(OR)
b. What is Friend class? What are the advantages and limitations of them? Give illustrations to support your answer.

13. a. Explain generic programming? How is it implemented in C++? Develop a program in C++ to implement Linear Search of an array (Array can be of any type).
(OR)
b. What is meant by exceptions? How an exception is handled in C++? Bring out the advantages of using various exception handling mechanisms.

14. a. Develop an object oriented program in C++ to create a payroll system for an organization where one base class consist of employee name, code, designation and another base class consist of account no and date of joining. The derived class consists of the data members such as basic pay, DA, HRA, CCA and deductions PF, LIC, IT.(Program must use the concept of virtual base class)
(OR)
b. What are the different forms of inheritance? Give example for them.

15. a. Explain with neat block diagram the I/O manipulators used in C++.
(OR)
b. Using file handling methods of C++ write a program and explain how to merge the contents of two files into one file.

*****THE END*****