ANNA UNIVERSITY COIMBATORE

B.E. / B.TECH. DEGREE EXAMINATIONS : JUNE 2009

REGULATIONS - 2007

FOURTH SEMESTER

070230004 – OBJECT ORIENTED PROGRAMMING

(COMMON TO CSE / IT)

TIME : 3 Hours **Max.Marks : 100**

PART – A

(20 x 2 = 40 MARKS)

ANSWER ALL QUESTIONS

1. Define an object with respect to its identity.
2. Give one example for data abstraction.
3. List any four advantages of OOPS over traditional structured programming.
4. List out the five basic data types in C++.
5. Differentiate array and structure.
6. Enumerate any two advantages of Inline functions.
7. Write a C++ program to represent function overloading.
8. Write down the syntax and usage of a 'Friend function'.
9. List out any two operators that cannot be overloaded.
10. Give the uses of 'new' and 'delete' operators.
11. Categorize the types of polymorphism.
12. State the difference between a non-virtual c++ member function and a virtual member function
13. Discuss any one limitation of inheriting more than one base class.
14. Give the restriction in overloading of generic function.
15. Define Exception with respect to one example
16. When does terminate( ) function call carry out ?
17. Define file. List out the file operations.
18. List out different File Modes in C++.
19. How does Console I/O handling carry out in C++ ?
20. List out the functions used for Random access.

PART – B

(5 x 12 = 60 MARKS)

ANSWER ANY FIVE QUESTIONS

21. a) Explain various control statements in C++. (6)
    b) List the different operators available in C++ with their level of priorities (6)

22. a) Write a program to illustrate class declaration, definition and accessing class members (6)
    b) What is a Constructor ? What are the characteristics of constructor functions? Give one example in C++ (6)

23. What is operator overloading? Write at least four rules for Operator overloading. (12)

24. a) Write a C++ Program to overload unary minus operator. (6)
    b) Explain multilevel inheritance with one programming example in C++ (6)

25. Write short notes on virtual base class with suitable example (12)

26. a) Write a C++ program to swap two character type values, two integer type values and two float type values using Function Templates. (6)
    b) List the steps involved in throwing an exception through out the class (6)

27. a) How does Uncaught Exception handling carry out ? Explain with an example program code (6)
    b) Write a program in C++ to transfer contents of one file to another (6)

28. Trace the application of any four type casting operators over a file access program written in C++ (12)