ANNA UNIVERSITY COIMBATORE

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

REGULATIONS - 2007

FOURTH SEMESTER – ELECTRICAL AND ELECTRONICS ENGINEERING

070230046 – OBJECT ORIENTED PROGRAMMING

TIME : 3 Hours   Max.Marks : 100

PART – A

(20 x 2 = 40 MARKS)

ANSWER ALL QUESTIONS

1. What is object oriented programming? How is it different from the procedure oriented programming?
2. How is dynamic binding achieved in C++?
3. With an example explain an abstract data type.
4. What is the purpose of malloc and free operators?
5. What is the default access mode for class members?
6. State the mechanism of passing objects to a function.
7. How does a constructor differ from a normal function?
8. State why a destructor is used when developing an application in C++.
9. What are the limitations of multiple inheritance?
10. Justify the need for virtual functions in C++.
11. What are the advantages of abstract classes?
12. List the operators that cannot be overloaded in C++.
13. Compare the important features of C++ and JAVA.
14. Define JVM.
15. List the four integer types supported by JAVA.
16. Distinguish between overloading and overriding.
17. List the four categories of visibility addressed by JAVA for class members.
18. What is the major difference between interfaces and classes?
19. What is a package?
20. Discuss the package access protection.

PART – B

(5 x 12 = 60 MARKS)

ANSWER ANY FIVE QUESTIONS

21. a) Discuss the non-object oriented features of C++ with programming examples. (8)
    b) State the merits and demerits of object oriented methodology. (4)

22. a) Explain copy constructor with suitable C++ coding. (8)
    b) What are the differences between default and parameterized constructors? (4)

23. With relevant examples discuss the different types of inheritance supported by C++. (12)

24. a) Write a C++ program to overload the assignment operator. (8)
    b) List out the rules for overloading operators. (4)

25. a) Explain method overriding with suitable Java coding. (8)
    b) Does JAVA support multiple inheritance? Discuss. (4)

26. Write a Java program to create the class Rectangle and Square. Compute their area and compare the areas. List the features of OOP used and explain them. (12)

27. Explain the various forms of interface implementation. (12)

28. What is the purpose of using packages? How do you create user-defined package? Give an example. (12)

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