

**D 4036**

B.E./B.Tech. DEGREE EXAMINATION, MAY/JUNE 2007.

Third Semester

(Regulation 2004)

Computer Science and Engineering

CS 1204 — OBJECT ORIENTED PROGRAMMING

(Common to Information Technology)

(Common to B.E. (Part-Time) Second Semester Regulation 2005)

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. What are the main characteristics of OOP language?
2. What are the valid types of data that the main( ) can return in C/C++ language?
3. What are the difference between default and parameterized constructors?
4. List out the properties of a static member function.
5. What are the functions supported by filestream classes for performing I/O operations?
6. What are the types of exceptions? C++ provides what type of exceptions.
7. Define JVM.
8. What is the major difference between interfaces and classes?
9. Define multithreading.
10. What are the two methods by which we may stop threads?

PART B — (5 × 16 = 80 marks)

11. (a) (i) Describe the advantages of OOP. (8)  
(ii) What are the differences between pointers to constants and constant pointers? (8)

Or

- (b) (i) Describe the applications of OOP technology. (8)  
(ii) What is inline functions? Explain the situations where inline expansion may not work? (8)
12. (a) (i) Explain copy constructor with suitable C++ coding. (8)  
(ii) List out the rules for overloading operators. (8)

Or

- (b) (i) Explain hybrid inheritance with suitable C++ coding. (8)  
(ii) Define polymorphism. Explain the different types of polymorphism. (8)
13. (a) Write a C++ program to read from 2 files simultaneously. (16)

Or

- (b) Explain multiple catch statement with the help of suitable C++ coding. (16)
14. (a) Explain method overriding with suitable Java coding. (16)

Or

- (b) (i) Write a Java program for alphabetical ordering of strings. (10)  
(ii) Explain the different forms of inheritance supported in Java. (6)
15. (a) Explain various forms of interface implementation. (16)

Or

- (b) Write a Java program to throw user defined exceptions. (16)