

**IV B.Tech I Semester Supplementary Examinations, April/May 2005**  
**OBJECT ORIENTED PROGRAMMING & JAVA**  
**(Electrical & Electronic Engineering)**

**Time: 3 hours**

**Max Marks: 80**

**Answer any FIVE Questions**  
**All Questions carry equal marks**

\*\*\*\*\*

1. Write a C++ program to perform simple complex number arithmetic operations such as addition, subtraction, multiplication and division.
2. (a) What is the purpose of the ternary operator ? How it is used in a c++ program ? explain with suitable example situation.  
(b) What are the looping structures available in C++ ? Write the syntax and flow chart for each structure with an example situation.
3. (a) What is a Friend function? Explain its significance with an example using C++ pseudo code?  
(b) Explain the significance of pseudo variable this in operator overloading?
4. (a) How is a direct base class different from the indirect base class declaration in C++?  
(b) Explain how a data member and member functions of a base class can be accessed by the derived class member functions
5. (a) What happens when raised exception is not caught by catch-block?  
(b) Write a program for matrix multiplication. The matrix multiplication function should notify if the order of matrix is invalid using Exceptions.
6. (a) Write a java program to multiply two matrices. Before multiplication check whether multiplication is possible or not, print suitable messages.  
(b) Write a Java program to swap two integer values stored in variable without using a temp or third variable.
7. (a) Explain how to hide the class from accessing while importing a package.  
(b) How do you add an interface to a Package.  
(c) What is the use of setting the CLASSPATH variable ?  
(d) Explain how to use Java system packages.
8. (a) What is the access rights of methods implementing an interface ?  
(b) Can an interface inherit another interface ? If yes ,explain how with an example ?  
(c) Write a Java program to implement multiple inheritance using interface.

\*\*\*\*\*