**R09** 

Code No: R09220503

## JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY, HYDERABAD B.Tech II Year II Semester Examinations, May-2013 Object Oriented Programming

(Common to CSE, IT) Time: 3 hours Max. Marks: 75 Answer any five questions All questions carry equal marks Write briefly on the features of Java programming language. 1.a) .... b) Write a Java program to print the sum of positive numbers and the sum of negative numbers of the command line arguments. [6+9]2.a) Explain with an example on inner classes and nested classes. Write in detail on the usage of static and final keywords in Java. b) [7+8]"3.a) Write in detail on interfaces and abstract classes in Java language. Give any three interfaces and abstract classes from Java. Explain with example how new classes can be derived from existing class. [7+8] b) Explain the concept of a package and how new packages can be created and used 4.a) in other elasses in Java. .... :.... b) \*\*\*\*\*\*\*\* 5.a) Explain how a new Exception class can be created and used in another Java program. Write briefly on multithreaded programming and interthread communication in b) 6.a) Write in detail with a sample program on event handling in Java. b) Write briefly on Adapter classes and Listener classes in Java. [8+7]7. Write a Java program for implementing a basic calculator using Swings. [15] Write a Java program to copy a file in the reverse into another file. The first character must become the last and the last character must become the first. [15]