

END TERM EXAMINATION**FOURTH SEMESTER [B.TECH.] MAY-JUNE-2018****Paper Code: IT-202****Subject: Java Programming****Time: 3 Hours****Maximum Marks: 75**

**Note: Attempt five questions in all including Q.No 1 which is compulsory.
Select one question from each unit.**

- Q1 (a) What are the compilation and executing commands for a java program. (2)
 (b) What are Sockets. (2)
 (c) Explain overriding methods. (2)
 (d) What are adapter classes? (2)
 (e) Explain the difference between keywords throw and throws using example. (2)
 (f) What are wrapper classes and Object class? (3)
 (g) What is Random Access file? Explain two methods of accessing Random Access File. (3)
 (h) Write differences between an Application and an Applet. (3)
 (i) Write differences between abstract class and interface. (3)
 (j) Explain the usage of keyword 'final'. (3)

UNIT-I

- Q2 (a) Explain different types of class loaders in java. What are the differences and similarities in different types? (6.5)
 (b) Briefly explain the characteristics of java. (6)

Q3 Explain the components of JVM. How is sandbox model implemented? (12.5)

UNIT-II

- Q4 (a) What is an applet? Discuss the life cycle of an applet? (6)
 (b) Write an applet to add two numbers and display result. (6.5)

- Q5 (a) What is an exception? Explain the five keywords used in exception handling. (6)
 (b) Write a program to illustrate user defined exceptions. (6.5)

UNIT-III

- Q6 (a) What are layouts? Explain different types of layouts. (6)
 (b) Write a program to illustrate one of the layout using five components. (6.5)

- Q7 (a) What are threads? Explain the lifecycle of a thread. (6.5)
 (b) Write a program to create three threads using runnable interface. (6)

UNIT-IV

- Q8 What is RMI? Explain how RMI is used to invoke methods from a remote location. Write code for the same. (12.5)

- Q9 What do you mean by driver used in database connectivity Explain different types of drivers used in Java Database Connectivity. Write a program to retrieve data from Oracle database using JDBC connectivity. (12.5)