B.Tech / Integrated (MBA/M.Tech) 4th Semester Examination
June 2014
Core Java
Subject Code: CSL-208

Roll. No………………………… 1224004

Time Allowed: 03 hours.  Maximum Marks: 100

Before answering the question paper the candidate should ensure that they have been supplied the correct question paper. Complaints in this regard, if any, shall not be entertained after the examination.

Note: Question No. 1 is Compulsory and attempt two questions from each section. All questions carry equal marks.

1. (a) What is meant by garbage collection? (b) Define and explain method overriding. (c) What are wrapper classes? Why are they required? (d) Differentiate between AWT and Swing. (e) Differentiate between Path and Classpath environment variable. (4*5)

SECTION-A

2. (a) Define a class BankAccount. Include the following data members:
   a. Name of depositor
   b. Account number
   c. Type of account
   d. Balance amount in account

   Member functions:
   1. To assign initial values
   2. To deposit an amount
   3. To withdraw an amount after checking balance
   4. To display name and balance.

   Write another class to test the BankAccount class. (10)

(b) What is constructor? Explain different types of constructor with an example. (10)

3. (a) Explain three uses of static keyword with example. (10) (b) Explain the exception handling mechanism? Write a program to implement it. (10)

4. Differentiate between process and thread. Explain lifecycle of a thread. Write a program to implement multithreading. (20)

SECTION-B

5. (a) Explain complete hierarchy of collections in detail. (10) (b) Explain the use of generic programming using a program. (10)

6. (a) Explain life cycle of an applet. Write an applet program to get values from user. (10) (b) Explain different types of layout managers? (10)

7. (a) What is object serialization? Why is it required? Explain using a program. (10) (b) Write a program to data the data from a file. (10)