(Pages : 2) **4710**

Reg. No. : .....

Name : .....

Fifth Semester B.Tech. Degree Examination, September 2014
(2008 Scheme)
(Special Supplementary)
08.506 : OBJECT ORIENTED DESIGN AND JAVA PROGRAMMING (R)

Time : 3 Hours Max. Marks : 100

PART – A

Answer **all** questions.

1. Write a note on the data types in Java.
2. Explain why the definition of main method is preceded by the keywords public, static and void.
3. Define abstract class and interface. How and why are they used ?
4. Give the uses of final keyword, with examples.
5. Write a note on wrapper classes in Java.
6. Define swing in Java. What are the advantages of swing over AWT components ?
7. Write a note on the use of wait () and notify () methods available with Thread class.
8. Write a note on generative and non-generative patterns.
9. Write a note on frameworks.
10. Write a note on use-case diagram. **(10×4=40 Marks)**

P.T.O.

PART – B

Module – I

11. a) How do you develop object oriented system development life cycle ? Briefly discuss all the phases related to object oriented approach with an example.

    b) Explain in detail, the diagrams and processes involved in the Booch methodology.

OR

12. a) List the graphical diagrams defined by UML and illustrate each with examples.

    b) Consider the development of library management system. Discuss the steps involved in applying object oriented analysis technique of your choice.

Module – II

13. a) Explain how multiple inheritance is implemented in Java, with example.

    b) Rational numbers are numbers that can be represented as a fraction p/q where p is an integer number and q is a positive integer (q ! = 0). Design and implement a Java class Rational Number for representing such numbers. Implement methods to add and multiply two rational numbers. Implement a method for returning the value of a rational number as a double value. Make sure that the numerator p and denominator q do not have common divisors in your implementation.

OR

14. a) Explain exception handling mechanism in Java, with suitable examples.

    b) Write a program to create a package named mypack, containing a class Prime in which a static method check for a number is prime or not and returns that information. Import this package in another class and use to check a given number is prime or not.

Module – III

15. a) Write a Java program with 3 threads as follows :

    thread – 1 displays all even numbers below 100, thread – 2 displays all fibonacci numbers below 100 and thread – 3 displays all square numbers below 100.

    b) Explain the steps in connecting java program to database, with example.

OR

16. a) Using applet and thread, write a program that displays digital clock (time in hours : minutes : seconds), starting from time 00 : 00 : 00.

    b) What is delegation event model ?

(3×20=60 Marks)