Reg. No. :....

Name :.....

Fifth Semester B.Tech. Degree Examination, November 2015

(2013 Scheme)

13.506 OBJECT ORIENTED DESIGN AND JAVA PROGRAMMINIG (R)

Time: 3 hrs

Marks: 100

(5X4=20 Marks)

PART A

Answer all questions

- 1. What is the significance of UML Meta model?
- 2. What is an interface? What is the significance of it in inheritance hierarchy?
- 3. Describe the following methods related to Thread i) suspend() ii) notify() iii) sleep()
- 4. Which JDBC driver is suitable for web databases? Why?
- 5. Mention different atomic components in swing.

PART B

Answer any one question from each module

Module - I

6. Draw a UML user case diagram and class-diagram for a partial specification of the system described below.

A library loans three different kinds of items to customers: books, video tapes and compact disks. Each item has a title, and publisher. In addition, books have an author, and CDs have an artist. The library may have multiple copies of the same book, video tape or compact disk. There are two different kinds of customer: students and staff. For both kinds of customer, the library has their name, sex and address. Students may borrow at most 20 items. (20)

OR

7. a) Write a short note on Rumbaugh Methodology.

(10)

| b) What is sequence diagram? When is it appropriate to use this diagram? | (10) |
|---|-------------|
| Module - II | |
| 8. a) Write a Java program to find a word from a text and replace it with another word. (12) | |
| b) Describe various forms of implementing interface with example | (8) |
| OR | |
| 9. a) Define an exception called 'NoMatchException' that throws when a string is not equal to | |
| 'India'. Write a program that uses this exception. | (12) |
| b) Describe the uses of final and super keywords with respect to inheritance | (8) |
| Module – III | |
| 10. a) Write an applet program that accepts two input string using <param/> tag and concatenate | e the |
| strings and display it in status window. | (15) |
| b) What are the various streams available in java? | (5) |
| OR | |
| a) Write a program to create two threads, one thread will print odd numbers and second will print even numbers between 1 to 20 numbers. | thread (12) |
| b) Describe about the thread life cycle | (8) |
| Module - IV | |
| 12. a) Explain the event handling mechanism in java. | (8) |
| b) Describe the steps for establishing JDBC connectivity to java | (12) |
| OR | |
| 13 a) Draw a simple GUI with necessary controls for performing four basic arithmetic operations | |

13. a) Draw a simple GUI with necessary controls for performing four basic arithmetic operations addition, subtraction, multiplication and division along with a 'History' button to show the last five operations. Connect the GUI to a database so that the database can store all operands, operations and results of last five arithmetic operations that have been performed. Write the code for handling the events associated with each control and connecting the database. Use Type1 or Type4 connector. (20)