

Reg. No. : . J. L.A. 2. 3. 0. Mountaine all Inamgolevab amataya batnano toalde nislax El (s

b) Draw a UNIL place diagram and object diagram for all

Fifth Semester B.Tech. Degree Examination, November 2013 (2008 Scheme)

08.506 - OBJECT ORIENTED DESIGN AND JAVA PROGRAMMING (R)

Time: 3 Hours

Max. Marks: 100

PART-A

Answer all questions.

 $(10\times4=40 \text{ Marks})$ 

- 1. What are the basic building blocks of UML?
- 2. What is the role of sequence diagram? Illustrate with example.
- 3. What is the need of modeling in object oriented methodology?
- 4. What is the relation between a final object and a final member function of a class?
- 5. Why can't a derived class access the private members of its base class?
- 6. What is collection interface? Illustrate its usage.
- 7. How can you relate an abstract class to data abstractions in JAVA?
- 8. What are the fundamental methods used to control the basic operations of an applet?
- 9. What are the different states of a thread in its life cycle?
- 10. How can a GUI component handle its own events?

Answer one question from each Module.

## Module - I

- 11. a) Explain the following object oriented methodologies:
  - i) Rumbaugh methodology.
  - ii) Booch methodology.
  - b) Draw the class relationship by specifying inheritance and aggregation for opening and closing of savings and current bank account.



OR

P.T.O.

12. a) Explain object oriented systems development life cycle 10 10 b) Draw a UML class diagram and object diagram for any two loop statements in 10 JAVA programming language. Module - II 13. a) What are the benefits of inheritance? b) What are the different types of polymorphism? What kind of polymorphism are supported by JAVA? Write examples also. 15 14. a) Explain wrappers for primitive data types. 10 b) Write a JAVA program to search a particular word in a text. 10 § 225lo s to redonut redmern lant Module - Illant a nesured 15. a) Write a swing application to display a solid circle that is perfectly inside the outline of a square. 10 10 b) Explain the methods used for inter thread communication. 16. a) Develop a swing application that receives three numeric values as input from the user and displays the largest among them on the screen. 10 b) Explain the different steps required for JAVA database connectivity and to access the data from the database. 10