Roll No.

B.E / B.Tech (Full Time) DEGREE END SEMESTER EXAMINATIONS, APR / MAY 2014

COMPUTER SCIENCE AND ENGINEERING / INFORMATION TECHNOLOGY

FIFTH Semester

CS9301 OBJECT ORIENTED ANALYSIS AND DESIGN

(Regulation 2008)

Time : 3 Hours

Answer ALL Questions

Max. Marks 100

PART-A (10 x 2 = 20 Marks)

- 1. What is object orientation?
- 2. Draw a sample state diagram.
- 3. List some of the ways to find conceptual classes.
- 4. Draw an example sequence diagram and explain.
- 5. Draw a figure which explains the idea of using Layers.
- 6. List different types of visibility.
- 7. What are different ways that people wish to apply UML.
- 8. Discuss the nature of UML tools.
- 9. Explain the Polymorphism pattern.
- 10. Describe any one of the GoF patterns.

$Part - B (5 \times 16 = 80 marks)$

11. For a cricket score board display,

(i) determine the system boundary, primary actors and goals (4)

- (ii) identify use cases (6)
- (iii) write a brief use case for one of them. (6)
- 12. a) (i) Discuss the concept of multiplicity of links and associations in class modeling using appropriate diagrams. (8)

(ii) Describe some of the elements of supplementary specifications. (8)

OR

b) (i) Discuss the concept of branches in activity models in interaction modeling using appropriate diagrams. (8)

(ii) Describe some of the sections of operation contracts. (8)

13. a) (i) Clearly draw and explain each of the different sequence diagram notations.

OR

- b) (i) Clearly draw and explain each of the communication diagram notations.
- 14. a) Use an example and describe the steps in how designs are mapped to code.

OR

- b) Use an example and describe the steps in test-driven development and refactoring.
- 15. a) Write short notes on (i) Architectural Analysis (8)
 - (ii) Package design (8)

OR

b) Write short notes on (i) Logical architecture refinement (8)

(ii) Persistence framework (8)