Reg. No.:											

Question Paper Code: 51136

B.E./B.Tech. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2014.

Sixth Semester

Computer Science and Engineering

080230028 — OBJECT ORIENTED SYSTEM DESIGN

(Regulation 2008)

Time: Three hours

Maximum: 100 marks

Answer ALL questions.

PART A — $(10 \times 2 = 20 \text{ marks})$

- 1. What is object model?
- 2. Differentiate between Generalization and Inheritance.
- 3. What is an abstract class?
- 4. State the benefits of modeling interaction diagrams.
- 5. What is purpose of class model?
- 6. What is System conception?
- 7. What is a pattern? Mention its advantages.
- 8. What is meant by refactoring? Specify its uses.
- 9. Differentiate between object-oriented databases and traditional databases.
- 10. How do you implement method into a class?

PART B — $(5 \times 16 = 80 \text{ marks})$

11. (a) What is modeling? Explain Object Modeling Technique (OMT) in detail.

Or

- (b) Draw and explain a class model with necessary associations, generalization, Inheritance, abstraction for video rental system.
- 12. (a) (i) Write a short note on:
 - (1) Reification. (3)
 - (2) Packages. (3)
 - (ii) In online auction system seller add the item in the list for bid. Timer is set for bidding. During the bidding time buyer will bid for the item. If bid amount is more then sellers' minimum expected amount then highest bid will be accepted otherwise restart the bidding by resetting the bid time. Draw the state machine diagram for the Bid. Explain Nested State diagram with an example. (10)

Or

- (b) (i) Draw an activity diagram for online purchase. While ordering for items customer has to provide his personal details. System should provide catalog for item selection. Customer can make cash or card payment for his order. (8)
 - (ii) Draw a use case diagram for video rental system. (8)
- 13. (a) What is Elaboration? Explain the artifacts of elaboration in detail. (16)

Or

- (b) What is a Domain model? How will, you create a Domain model? Illustrate the same with an example. (16)
- 14. (a) Enumerate the issues of handling global resources and boundary conditions.

Or

- (b) Explain the architecture of the ATM system.
- 15. (a) Discuss the basic and advanced concepts required for implementing the database structure.

Or

(b) Discuss the steps involved in implementing the class functionality using any of the object oriented languages (C++/java).

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