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**Question Paper Code : 21392**

B.E./B.Tech. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2015.

Sixth Semester

Computer Science and Engineering

CS 2353/CS 63/10144 CS 603 — OBJECT ORIENTED ANALYSIS AND DESIGN

(Common to Information Technology)

(Regulations 2008/2010)

(Common to PTCS 2353/10144 CS 603 — Object Oriented Analysis and Design for  
B.E. (Part-Time) Fifth Semester — Computer Science and Engineering –  
Regulations 2009/2010)

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. What is UML?
2. List the phases of Unified Process.
3. Why a domain model is called as visual dictionary?
4. With an example, differentiate aggregation and composition.
5. What is the need for drawing sequence diagram?
6. Mention any two benefits of using layers in software design.
7. What do you mean by patterns?
8. Describe the types of responsibilities.
9. Write an operation contract for *enterItem* system operation.
10. Define component.

PART B — (5 × 16 = 80 marks)

11. (a) The Insurance Claim Management System(ICMS) is a web-based application, designed to cover a wide range of insurance company and management processes. It provides relevant information across the insurance company to support effective decision making for clients, insurance administration, claim and financial accounting in a seamless flow. For the ICMS system,

- (i) Write the requirement statement. (4)
- (ii) Identify actors, use cases and draw the primary use case diagram. (4)
- (iii) Draw the state chart diagram for the system. (4)
- (iv) Draw the activity diagram for any one primary activity. (4)

Or

- (b) (i) Discuss about inception and its artifacts. (8)
- (ii) What are the three common use case formats? Write the use case for the *process sale* of POS system. (8)
- 12. (a) (i) Discuss the strategies to find conceptual classes. (8)
- (ii) Write short notes on UML activity diagrams. (8)

Or

- (b) Explain the multiplicity of links and associations in class model with your own example. (16)
- 13. (a) With the neat diagrams, discuss the different notations used for drawing sequence diagram. (16)

Or

- (b) (i) Discuss about logical architecture refinement. (8)
- (ii) With an example, discuss the relationship between sequence diagram and use cases. (8)
- 14. (a) Explain the GoF patterns with example. (16)

Or

- (b) (i) Define visibility. Explain the types of visibility with examples. (8)
- (ii) Explain any four GRASP patterns for the object design of Monopoly game. (8)
- 15. (a) Write short notes on:
  - (i) Mapping design to codes. (8)
  - (ii) Applying state machine diagrams. (8)

Or

- (b) Discuss in detail about UML deployment and component diagrams. (16)