18/5/17 (AN)

Reg. No. : | | | | | | | | | | | | |

Question Paper Code : 73390

B.E./B.Tech. DEGREE EXAMINATION, APRIL/MAY 2017.

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)

(Also common to PTCS 2353 — Object Oriented Analysis and Design for B.E. (Part-Time) Fifth Semester – CSE – Regulations 2009)

Time : Three hours Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. What is Analysis and Design?

2. State the role of UML in designing a software.

3. What is a Domain Model?

4. Define Aggregation and Composition.

5. List the relationships used in class diagram.

6. What is the use of sequence diagram?

7. What is Design Pattern?

8. What is meant by Low Coupling?

9. Define 'Component" with an example.

10. What is UML deployment?

PART B — ($5 \times 16 = 80$ marks)

11. (a) List various UML diagrams and explain the purpose of each diagram. (16)

Or

(b) Explain with an example, how use case modeling is used to describe functional requirements. Identify the actors, scenario and use cases for the example. (16)

12. (a) Describe the strategies used to identify conceptual classes. Explain the steps to create a domain model used for representing conceptual classes. (16)

Or

(b) (i) Explain about activity diagram with an example. (6)

(ii) With an example compare aggregation and composition relationship. (10)

13. (a) With a suitable example explain how to design a class. Give all possible representation in a class (such as name, attribute, visibility, methods, responsibilities). (16)

Or

(b) Explain about UML interaction diagrams with a suitable example. (16)

14. (a) Explain "GRASP" in terms of designing objects with responsibilities in detail. (16)

Or

(b) Write short notes on adapter, singleton, factory and observer patterns. (16)

15. (a) (i) Briefly explain about Operation contracts. (8)

(ii) Write short notes about deployment diagram. (8)

Or

(b) What is the purpose of state chart diagram? How to draw state chart diagram? Explain with an example state machine. (16)