Reg. No. : ☐☐☐☐☐☐☐☐☐☐☐

Question Paper Code : 80297

B.E./B.Tech. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2016.

Fifth Semester

Computer Science and Engineering

CS 6502 — OBJECT ORIENTED ANALYSIS AND DESIGN

[Common to Information Technology]

(Regulations 2013)

Time : Three hours   Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. What are the three perspectives to apply UML?

2. What are the primary goals in the design of UML?

3. Define patterns and design patterns.

4. Distinguish between coupling and cohesion.

5. Why call a Domain Model a 'Visual Dictionary'?

6. How to create a Domain Model?

7. How to Naming System Events and Operations?

8. Define System Events and the System Boundary.

9. What is refactoring?

10. What is Regression testing?

PART B — (5 × 16 = 80 marks)

11. (a) (i) Explain in detail about Unified Process in Object Oriented Analysis and Design. Explain the phases with neat diagrams.   (8)

    (ii) What is UML Activity Diagram? Using an example explain the features of basic UML activity diagram notation.   (8)

Or

    (b) Apply interactive modeling for a payroll system in UML.   (16)

12. (a) Explain creator and controller design patterns with examples. (16)

Or

(b) Explain the design principles in object modeling. Explain in detail the GRASP method for designing objects with examples. (16)

13. (a) What is the purpose of a use case model? Identify the actors, scenarios and use cases for a library management system. (16)

Or

(b) (i) Discuss in detail about the three strategies to find conceptual classes. (8)

(ii) Explain association, aggregation and composition relationships in detail. (8)

14. (a) What are System Sequence Diagrams? What is the relationship between SSDs and Use cases? Explain with an example. (16)

Or

(b) Draw a neat sketch of the logical layered architecture of NextGen application and explain the components in detail. (16)

15. (a) Explain in detail about the mapping of design to code implementation in an object oriented language. (16)

Or

(b) Discuss in detail about OO Integration Testing and OO System Testing. (16)