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

Question Paper Code: 71683

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

Fifth/Sixth 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 — $(10 \times 2 = 20 \text{ marks})$

- Define OOAD.
- 2. What are the perspectives to apply UML?
- Differentiate cohesion and coupling.
- Define modular design.
- 5. What is the relationship of a conceptual super class to a subclass?
- 6. What is the purpose of extends and include relationship in use case diagram?
- 7. What are the strengths and weakness of sequence and collaboration diagram.
- 8. Difference between logical architecture and layers.
- 9. Mention the steps involved in mapping design to code.
- 10. Explain about OO Integration Testing.

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

11. (a) Explain about UML diagrams in detail with neat example. (16)

Or

(b) Explain in detail about Unified Process in OOAD? Explain the phases with neat diagram. (16)

| 12. | (a) | Explain the following GRASP patterns: Creator, Information Expert, Low Coupling, High Coupling and Controller. (16) |
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| | | \mathbf{Or} |
| | (b) | Explain in detail about the Factory Pattern and mention the Limitations and applications of Factory pattern. (16) |
| 13. | (a) | Write briefly about elaboration and discuss the difference between elaboration and inception with neat diagram. (16) |
| | | Or' |
| | (b) | (i) Explain the guidelines for finding conceptual classes with neat diagram. (10) |
| | | (ii) Explain about Aggregation and Composition with examples. (6) |
| 14. | (a) | Explain the UML Class, Sequence and Interaction diagrams for Library Management System. (16) |
| | | . Or · |
| | (b). | State Model-View Separation principle and explain its motivations. (16) |
| 15. | (a) | Explain the issues involved in OO Testing. (16) |
| | | Or |
| | (b) | Explain the following |
| | | (i) GUI Testing |
| | | (ii) OO System Testing. |
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