

B.E. (Computer Engineering)
OBJECT ORIENTED MODELING AND DESIGN
(2019 Pattern) (Semester - VII) (410244 D) (Elective - III)

Time : 2½ Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) Attempt Q.No.1 or 2, Q.No.3 or 4, Q.No. 5 or 6, Q.No. 7 or 8.
- 2) Figures to the right indicate full marks.
- 3) Neat diagrams must be drawn wherever necessary.
- 4) Assume suitable data, if necessary.

- Q1)** a) What is Interaction Diagram? Explain Different Components of Sequence diagram. [6]
b) Compare Sequence diagram and Activity diagram. [6]
c) Design use case diagram for online reservation system. [6]

OR

- Q2)** a) What are Composite states? Explain Categories of Composite states. [6]
b) Explain following terms with respect to use case. [6]
i) Use Case.
ii) Actor.
iii) System Boundary.
c) Draw Activity Diagram for ATM Machine. [6]

- Q3)** a) Discuss the steps involved in constructing Application class model. Explain with suitable example. [6]
b) What is meant by sub system in system design? Explain breaking of system into subsystems and allocation of subsystems. [6]
c) What are categories of External Control? Explain in Detail. [5]

OR

- Q4)** a) Explain in detail components of a component diagram. [6]
b) Explain following with respect to deployment diagram. [6]
i) Node.
ii) Association.
iii) Dependency
c) Draw Deployment diagram for ATM System. [5]

- Q5)** a) Prepare a data dictionary for a ATM system scenario. Explain each element in a brief. [6]
b) What is abstraction? Explain different categories of abstraction. [6]
c) What do you mean by System Design? Explain with suitable example. [6]

OR

- Q6)** a) Give detailed guidelines for finding and defining classes involved in software system scenario. [6]
b) List and Explain different types of dependencies in package. [6]
c) Discuss how you identify use cases and actors with respect to use case diagrams. [6]

- Q7)** a) Explain. [6]
i) Creational Patterns.
ii) Structural Patterns.
iii) Behavioral Pattern.
b) Discuss Adapter Design Pattern. [6]
c) Discuss Observer Design Pattern. [5]

OR

- Q8)** a) What is Design Pattern? Explain different types of design Patterns. [6]
b) State and explain entities involved in design pattern. [6]
c) Explain Strategy Design patterns. [5]

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