H.T.No. | | | | | | | | | | |

Code No: CS3512 **SRGEC-R20**

III B.Tech II Semester Regular Examinations, May 2023

OBJECT ORIENTED ANALYSIS AND DESIGN

(Open Elective-III)

Time: 3 Hours **Max. Marks: 70**

Note: Answer one question from each unit.
All questions carry equal marks.

5 × 14 = 70M

UNIT-I

1. a) What is the purpose of structural things in UML? Briefly explain the structural things in UML. (8M)

   b) How does object oriented modeling differs from algorithmic perspective? Explain. (6M)

(OR)

2. a) Why do we model? Write the reasons for modeling. (7M)

   b) What is the need for extensibility mechanisms in UML? Explain with suitable example. (7M)

UNIT-II

3. a) Define Interface in Structural Model. What are various types and roles in Interface in Structural Model? (7M)

   b) Explain dependency and generalization relationships with suitable example. (7M)

(OR)

4. a) Use class diagrams to model Railway Reservation System. (7M)

   b) Differences between Class and Object with suitable examples. What are the Objectives of Design? (7M)

UNIT-III

5. a) Draw a use case diagram for Library Management System. (6M)

   b) Which two diagrams are known as isomorphic diagrams? Draw the interaction diagrams for Hospital Management System. (8M)

(OR)

6. a) Describe the purpose of usecase diagram. Draw usecase diagram for online shopping system. (6M)

   b) Explain sequence diagram? Draw the sequence diagram for ATM. (8M)

UNIT-IV

7. a) What is the purpose of an activity diagram? Illustrate with suitable example. (6M)

   b) Explain modeling of four kinds of events in UML with necessary examples. (8M)

(OR)

8. a) Design a state machine for Home Temperature Control System. (6M)

   b) What is the difference between statechart diagram and activity diagram? Explain your answer with an example. (8M)

UNIT-V

9. a) Exemplify common properties and common uses of component diagram. (7M)

   b) Explain the common modeling Techniques of Deployment diagrams? (7M)

(OR)

10. a) Write the steps to model adaptable systems using component diagrams. (6M)

    b) What is the significance of deployment diagrams? Draw deployment diagram for ATM. (8M)

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