C

Question Paper Code: 59831

B.E. / B.Tech. DEGREE EXAMINATION, MAY 2024

Elective

Information Technology

15UIT931 - OBJECT ORIENTED SYSTEM DESIGN

(Regulation 2015)

Duration: Three hours   Maximum: 100 Marks

Answer ALL Questions

PART A - (5 x 1 = 5 Marks)

1. Which of the following testing is done when the product is delivered to the user   CO1- R

   (a) Alpha   (b) Beta   (c) System   (d) All of the above

2. Identify the actor to find the behavior of the system.   CO2- R

   (a) Primary   (b) Support   (c) Offstage   (d) Secondary

3. OCL stands for   CO3- R
   (a) Object Constraint Language   (b) Object Control Language

   (c) Object Communication Language   (d) Object Class Language

4. If you are working on real-time process control applications or systems that involve concurrent processing, you would use a   CO4- R

   (a) Activity diagram   (b) Sequence diagram

   (c) State chart diagram   (d) Object diagram

5. Client side applications are attached to_____   CO5- R

   (a) Client   (b) Server   (c) Web page   (d) Cookies

PART – B (5 x 3= 15 Marks)

6. Write the role of object in the design of OOSD model.   CO1- R

7. Compare composition and aggregation.   CO2- R

8. What do you mean by state dependent object? Give an example.   CO3- R

9. Discuss the basic notation of component diagram   CO4- R

10. Mention the various issues in object oriented testing.   CO5- R

PART – C (5 x 16= 80Marks)

11. (a) Explain Object Oriented System Development life cycle with   CO1-U   (16)
        suitable example.

                                    Or

    (b) What do you mean by Unified Process in OOAD ? Explain the   CO1-U   (16)
        phases with suitable diagrams.

12. (a) Draw use case diagram for ATM system and also discuss the actors,   CO2- U   (16)
        scenarios and use cases in the same ATM system.

                                    Or

    (b) Design the class diagram for hotel management system with the   CO2- U   (16)
        appropriate relationships.

13. (a) Describe in detail basic notations of sequence and collaboration   CO3- U   (16)
        diagram with suitable examples.

                                    Or

    (b) (i) Draw a state diagram for Microwave Oven.   CO3- U   (8)

        (ii) Discuss the activity diagram with suitable examples.   CO3- U   (8)

14. (a) Discuss Booch and Rumbaugh Methodologies with the suitable   CO4- U   (16)
        example.

                                    Or

    (b) Identify the difference between Patterns and framework and describe   CO4- U   (16)
        the concept with a real time application.

15. (a) Draw the UML Deployment and Component diagrams for the   CO5- U   (16)
        Online Banking Operations.

                                    Or

    (b) Write class testing for stock maintenance system.   CO5- U   (16)

59831