Reg. No.											

Question Paper Code	11617

B.E. / B.Tech. - DEGREE EXAMINATIONS, NOV/DEC 2022
Fifth Semester
Information Technology
20ITPW502 - OBJECT ORIENTED ANALYSIS AND DESIGN WITH LABORATORY
(Regulations 2020)

Duration: 3 Hours

Max. Marks: 100

PART - A (10 × 2 = 20 Marks)
Answer ALL Questions

		Marks, K-Level, CO
1.	What are three Kinds of Actors and its example.	2,K1,CO1
2.	What are Use Case Diagrams?	2,K1,CO1
3.	What are the artifacts of the elaboration phase?	2,K1,CO2
4.	Define attribute and its types.	2,K1,CO2
5.	Identify the use of UML Package Diagrams.	2,K2,CO3
6.	Name the basic elements of a Deployment diagram.	2,K1,CO3
7.	Define Refactoring.	2,K1,CO4
8.	Interpret on "A system must be loosely coupled and highly cohesive".	2,K2,CO4
9.	How to present Dynamic Model of OMT.	2,K1,CO5
10.	List out the Myer's debugging principles.	2,K1,CO5

PART - B (5 × 13 = 65 Marks)
Answer ALL Questions

11.	a)	Explain about the different phases of Unified Process with a neat diagram.	13, K2,CO1
		OR	
	b)	For Banking Application (i) Show the system boundary, primary actors and goals. (ii) Identify use cases. (iii) Write a brief use case for one of them.	13, K2,CO1
12.	a)	Explain the benefits and concepts of Use Case and Use Case model and evaluate the ATM system by relating Use Cases.	13, K2,CO2
		OR	
	b)	Construct design for Library Information system which comprises following notations. 1. Aggregation 2. Composition 3. Associations	13, K2,CO2

K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze; K5 – Evaluate; K6 – Create   **11617**

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13. a) Develop the activity diagram, package diagram, Collaboration diagram for booking ticket in the Indian Railways e-ticket reservation system. 13, K3,CO3

OR

b) Summarize with an example, how Interaction Diagrams are used to model the dynamic aspects of a system. 13, K2,CO3

14. a) What is GRASP? Describe the design patterns and principles used in it. 13, K2,CO4

OR

b) Explain in detail about GOF Design pattern and describe it. 13, K2,CO4

15. a) Explain Jacobson's several testing levels and techniques with examples. 13, K2,CO5

OR

b) Summarize in detail about Rumbaugh method with illustrations. 13, K2,CO5

PART - C (1 × 15 = 15 Marks)

16. a) Explain the following UML diagrams for the Airline ticket reservation system. 15,K3,CO3
    a. Sequence diagram
    b. State machine diagram
    c. Component and deployment diagram.

OR

b) Develop various Test cases for the following ATM use case scenarios 15,K3,CO5
    a. Bank Transaction
    b. Checking transaction history
    c. Savings/Current account
    d. Deposit/Withdraw
    e. Valid/Invalid PIN