



R20 Regulation

Subject code:3P5FE

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

(Autonomous, Accredited by NAAC with 'A+' Grade)

B.Tech V Semester Supplementary Examinations, November 2025

OBJECT ORIENTED ANALYSIS AND DESIGN

(IT)

Maximum Marks: 70

Date: 18.11.2025

Duration: 3 hours

- Note: 1. This question paper contains two parts A and B.
 2. Part A is compulsory which carries 20 marks. Answer all questions in Part A.
 3. Part B consists of 5 Units. Answer any one full question from each unit.
 4. Each question carries 10 marks and may have a, b, c, d as sub questions.

Part-A

All the following questions carry equal marks (10X2M=20 Marks)		Marks	CO	BTL
1	List the four aims of modeling.	2M	1	L1
2	Justify how to extend the language in controlled ways by using extensibility mechanisms?	2M	1	L1
3	What is navigation with neat sketch?	2M	2	L1
4	Define composition with neat sketch.	2M	2	L1
5	List common uses of Use case Diagram.	2M	3	L1
6	Distinguish between activity and action states in UML.	2M	3	L1
7	Recall different kinds of components.	2M	4	L1
8	What do you mean by Deployment diagram?	2M	4	L1
9	Differentiate import interface and export interface.	2M	5	L1
10	Define stereotypes.	2M	5	L1

Part-B

Answer All the following questions. (5X10M=50Marks)		Marks	CO	BTL
11	a) Explain briefly about common mechanisms that apply consistent throughout the language. b) Explain about Rules in conceptual modeling.	5M 5M	1	L2
OR				
12	Explain briefly about diagrams in the UML.	10M	1	L2
13	Explain about Terms and Concepts in Relationships.	10M	2	L2
OR				
14	Sketch different common modeling techniques in object diagram.	10M	2	L2
15	a) Enumerate the steps to model the behavior of an element. b) With reference to class diagram enumerate the steps to forward and reverse engineer?	5M 5M	3	L2
OR				
16	a) How to model requirements of a system? Explain with an example. b) Enumerate the steps to model Forward and Reverse engineering in Use case diagram.	5M 5M	3	L2

17	Explain about common modeling techniques in Time and space.	10M	4.	L2
OR				
18	List common modeling techniques in Deployment.	10M	4	L2
19	a) Explain the steps to Modeling the design patterns. b) Discuss the Modeling the architectural patterns.	5M 5M	5	L2
OR				
20	a) Enumerate the steps to model embedded system? b) Draw Deployment diagram for the ATM bank system?	5M 5M	5	L2