R20 Regulation *Subject code: 3P5EA*

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

B.Tech V Semester Supplementary Examinations, April 2026

OBJECT ORIENTED ANALYSIS & DESIGN

(CSE)

Maximum Marks: 70 Date: 15.04.2026 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	What are the four aims of modelling?	2M	1	L1
2	Compare relationships.	2M	1	L1
3	Define stereotypes.	2M	2	L1
4	What is navigation?	2M	2	L1
5	Interpret the relationship between Use cases and actors.	2M	3	L1
6	Distinguish between action state and activity state.	2M	3	L1
7	Write about family of Signals.	2M	4	L1
8	List the common uses of deployment diagrams?	2M	4	L1
9	Define Analysis model.	2M	5	L1
10	Define frameworks.	2M	5	L1

Part-B

Answer All the following questions. (5X10M=50Marks)		Marks	CO	BTL
11	a) Explain briefly the classification of things with UML notation. b) Explain the various views considered in modeling a system's Architecture?	5M 5M	1	L2
	OR			
12	Explain the UML approach to software development life cycle.	10M	1	L2
13	Enumerate the steps for modeling simple dependencies and compare is-a relationship with has-a relationship.	10M	2	L2
	OR			
14	Draw and explain the class diagram for a bank ATM system.	10M	2	L2
15	a) Explain How to model flow of control by organization b) discuss the properties and common uses of sequence diagrams and collaboration diagrams	5M 5M	3	L2
	OR			
16	A) Explain about forking and joining concepts in activity diagram with an example.	5M	3	L2

	B) Draw swim lane flowchart for financial accounting template and customize it to show your processes and procedures.	5M		
17	Contrast action with activity. Define state and event. What are the various parts of a state? Explain briefly.	10M	4	L2
	OR			
18	a) Define node. Contrast node with components. b) Illustrate modeling Fully distributed system.	5M 5M	4	L2
19	Design use cases diagram for library Application.	10M	5	L2
	OR			
20	Design activity diagram for library Application.	10M	5	L2