R20 Regulation *Subject code: 3P5FE*

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

B.Tech V Semester Regular/Supplementary Examinations, February 2024

OBJECT ORIENTED ANALYSIS AND DESIGN

(Information Technology)

Maximum Marks: 70 Date:15.02.2024 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	CO	Bloom Tx
All the following questions carry equal marks (10X2M=20 Marks)			
1	List the principles of modelling in UML	CO1	L1
2	Explain why object oriented approach is preferable when compared to other approaches?	CO1	L2
3	Describe the structural things of UML.	CO2	L2
4	What is relationship? List the types of relationships?	CO2	L1
5	Distinguish between activity and action state in UML.	CO3	L2
6	Explain briefly about use case flow of events.	CO3	L1
7	What are the properties of a well-structured component diagrams?	CO4	L2
8	Define action states and activity states.	CO4	L1
9	What is meant by framework?	CO5	L1
10	Discuss the significance of patterns.	CO5	L2
	Part-B		
Answer All the following questions. (5X10M=50Marks)			Bloom Tx level
11	a. What are principles of modelling? Explain. [5M] b. Design the architecture of a software-intensive system and explain. [5M]	CO1	L6
	OR		
12	Illustrate the conceptual model of UML in detail. [10M]	CO1	L4
13	a. Discuss common modelling techniques of class diagram. [5M] b. Explain about structural diagrams. [5M]	CO2	L6
	OR		
14	a. Discuss about types and roles. [5M] b. Define an object. Mention common uses of objects. [5M]	CO2	L6
15	a. What is meant by use case? Explain about use case common modelling techniques with an example. [5M]	CO3	L5

	b. State and explain the common modelling techniques of use case diagrams. [5M]		
	OR		
16	a. Explain sequence diagram with suitable example. [5M] b. How to model the requirements of a system. [5M]	CO3	L4
17	a. How to model an embedded system? [5M] b. Differentiate the following: [3+2]M i) Components and classes ii) Nodes and components.	CO4	L4
	OR		
18	a. Explain about modelling interprocess communication. [5M] b. Compose the state chart diagram for ATM. [5M]	CO4	L3
19	Discuss about frameworks & mechanisms. [10M]	CO5	L6
	OR		
20	Design the class diagram for the ATM application. [10M]	CO5	L5