



R18 Regulation

Subject code: 2P6ED

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY  
(Autonomous, Accredited by NAAC with 'A' Grade)

B.Tech VI Semester Supplementary Examinations, June/July 2023

OBJECT ORIENTED ANALYSIS AND DESIGN

(Computer Science and Engineering)

Maximum Marks: 70

Date:05.07.2023 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=20Marks)

- 1 Define realization and generalization in UML.
- 2 Write the purpose of Swim Lanes in UML
- 3 Write the common uses of Class Diagram.
- 4 What is the difference between note and node.
- 5 Write the importance of Modelling
- 6 What is an Activity Diagram? Mention the elements of an activity diagram.
- 7 Write the differences between processes and threads.
- 8 Define Synchronization.
- 9 List Actors for Library application system.
- 10 Define pattern with an example.

Part-B

Answer All the following questions.

(10M X 5=50Marks)

- 11 a) Enumerate the Steps to model architectural views. [5]  
b) Discuss all the four Relationships with neat diagrams. [5]
- OR
- 12 Explain the various views considered in modeling a system's Architecture? [10]
- 13 Enumerate modeling static and dynamic type. [10]
- OR
- 14 a) Enumerate steps to model Vocabulary of a System. [5]  
b) Enumerate Steps to model distribution of responsibilities in a System. [5]
- 15 a) What is a Use Case. Explain about Use case description with an example. [5]  
b) State and explain common modelling techniques of use case diagrams. [5]
- OR
- 16 a) Differentiate between Sequence and Collaboration diagram. [5]  
b) Draw a Sequence diagram for Customer interaction with ATM machine. [5]
- 17 What is meant by state machine? Discuss about sequential sub states and history states with an example. [10]
- OR
- 18 Define an event and a signal. Explain briefly about the common modeling techniques of

events and signals. [10]

19 Explain the following:

a) Patterns and Architecture. [5]

b) Mechanisms and Frameworks. [5]

OR

20 Explain “Issuing of a book” operation for “The Unified library application” using Use case diagram and Class diagram. [10]