



R22 Regulation

Subject code:4E7FA

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

B.Tech VII Semester Regular Examinations, November 2025

SOFTWARE ENGINEERING (IT)

Maximum Marks: 60

Date: 24.11.2025

Duration: 3 hours

- Note:
1. This question paper contains two parts A and B.
 2. Part A is compulsory which carries 10 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

(10X1M=10 Marks)

	Marks	CO	Bloom Tx
1.a) List any two characteristics of software.	1M	1	L2
b) Compare Waterfall and Spiral models.	1M	1	L1
c) Define user requirements.	1M	2	L4
d) What is Interface Specification?	1M	2	L2
e) What is Data Design?	1M	3	L2
f) Define Architectural Pattern.	1M	3	L1
g) What is Software Testing?	1M	4	L4
h) What is the purpose of testing in Software Development?	1M	4	L3
i) List the Software Risks?	1M	5	L2
j) What is the purpose of Software Reviews?	1M	5	L1

Part-B

Answer All the following questions.

(5X10M=50Marks)

	Marks	CO	Bloom Tx
2 a) What is Software Process? Explain about the Software Engineering Process Framework.	5M	1	L2
b) Discuss about Spiral Model for Evolutionary Process Model?	5M	1	L3
OR			
3 a) Give a generic view of Software Engineering.	5M	1	L2
b) Discuss the advantages and disadvantages of Waterfall Model.	5M	1	L3
4 a) How would you specify System Requirements using a standard form?	5M	2	L1
b) Explain about Requirements Elicitation and Analysis.	5M	2	L2
OR			
5 a) Illustrate about Functional Requirements and Non-functional Requirements.	5M	2	L2
b) What are the Feasibility Studies for Requirements Engineering Process?	5M	2	L1
6 What is Software Architecture? Give Brief Taxonomy of Architectural Styles?	10M	3	L2

	OR			
7	Discuss about the Conceptual Model of UML.	10M	3	L3
8	Describe test strategies for Conventional Software. Explain the methods of Validation Testing?	10M	4	L2
	OR			
9	Briefly explain about Debugging Process with a neat diagram.	10M	4	L2
10	Elaborate about RMMM plan in Software Projects with example.	10M	5	L2
	OR			
11	Describe about the measures of Reliability and Safety in Software Quality Assurance. Analyze about the ISO 9000 quality standards.	10M	5	L2