



R20 Regulation

Subject code: 3P5HE

# TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

B.Tech V Semester Supplementary Examinations, November 2025

## SOFTWARE ENGINEERING

(CSE(DS))

Maximum Marks: 70

Date: 14.11.2025

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 applications of software.	2M	1	L1
2	List out the types of software myths.	2M	1	L1
3	Write the different types of system requirements.	2M	2	L1
4	What are functional requirements?	2M	2	L1
5	Why design is important in software engineering?	2M	3	L1
6	Define design model.	2M	3	L1
7	What is white box testing?	2M	4	L1
8	Write the importance of graph matrices in basis path testing.	2M	4	L1
9	Write about risk identification.	2M	5	L1
10	How overall project risk will be assessed?	2M	5	L1

### Part-B

Answer All the following questions. (5X10M=50Marks)		Marks	CO	BTL
11	Explain the layered technology of software Engineering.	10M	1	L2
OR				
12	Explain in detail waterfall model with the diagram and give certain reasons for its failure.	10M	1	L2
13	Discuss in detail about non-functional requirements with an example.	10M	2	L2
OR				
14	Compare and contrast functional requirements and non-functional requirements.	10M	2	L2
15	Explain in detail about design process along with its characteristics.	10M	3	L2
OR				
16	Discuss briefly the following fundamental concepts of software design: i) Abstraction ii) Modularity iii) Information hiding.	10M	3	L2
17	Explain about the importance of test strategies for conventional software.	10M	4	L2
OR				
18	What is testing? Discuss in detail about Black-Box testing.	10M	4	L2

19	Write briefly about Risk mitigation, monitoring, and management.	10M	5	L2
	OR			
20	Explain in detail about Reactive versus Proactive Risk Strategies.	10M	5	L2