R22 Regulation *Subject code: 4E4ED*

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

B.Tech IV Semester Regular Examinations, July 2024

SOFTWARE ENGINEERING

(Common to CSE,CSE(AI&ML) & CSE(DS))

Maximum Marks: 60 Date:25.07.2024 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	CO	Bloom Tx
All the following questions carry equal marks	(10x1M=10 Marks)		
1.a)	What do you mean by spiral model?	CO1	BL1
b)	Define agile process and list the types.	CO1	BL1
c)	What is functional requirement?	CO2	BL1
d)	List the major distinction between user requirements and system requirements?	CO2	BL2
e)	What is meant by design quality attributes?	CO3	BL1
f)	Define software architecture and write its importance.	CO3	BL2
g)	What are the generic characteristics of software testing?	CO4	BL1
h)	What is flow graph notation and show how it is important in white box testing?	CO4	BL2
i)	What is software risk?	CO5	BL1
j)	What is the main goal of risk mitigation in RMMM?	CO5	BL2
	Part-B		
Answer All the following questions.	(5X10M=50Marks)		Bloom Tx level
2	Explain Capability Maturity Model Integration (CMMI) in detail. [10]	CO1	BL3
	OR		
3	a) Examine a layered technology of software engineering.[5] b) Analyze waterfall model in the real world and state its merits and demerits. [5]	CO1	BL4
4	a) Demonstrate the structure of requirement document. [5] b) Show the possible users of requirement document. [5]	CO2	BL4
	OR		
5	Draw and explain the use case diagram for an ATM system in requirement elicitation. [10]	CO2	BL4

6	a) What is design process? Explain the characteristics of good design. [5] b) Classify various architecture styles. [5]	CO3	BL2 BL4
	OR		
7	Categorize various building blocks of UML. [10]	CO3	BL4
8	a) Describe in detail about various software testing strategies. [5] b) What are the various metrics used for software quality? [5]	CO4	BL4
	OR		
9	Explain black-box and White-box testing. [10]	CO4	BL3
10	a) Deliberate the procedure of formal technical reviews in testing the software. [5] b) Identify the importance of the ISO 9000 quality standards in improving software quality. [5]	CO5	BL4
	OR		
11	a) Discuss about the important activities involved in management of software quality assurance. [5] b) Compare reactive vs proactive risk strategies. [5]	CO5	BL3 BL4