

**CMR TECHNICAL CAMPUS
UGC AUTONOMOUS**

**B. Tech. III Sem Regular End Examinations, February-2024
Software Engineering
Common to CSM, AIML**

Time: 3 Hours

Max. Marks: 60

Note

- i. This Question paper contains Part- A and Part- B.
- ii. All the Questions in Part A are to be answered compulsorily.
- iii. All Questions from Part B are to be answered with internal choice among them.

PART-A

10 X 01 = 10 Marks

		Marks	CO	BL
1.	a Define software Engineering	1	CO1	L2
	b List the five levels of CMMI	1	CO1	L1
	c List any two types of requirements in Software development	1	CO2	L1
	d Define Feasibility Study	1	CO2	L2
	e What is data design?	1	CO3	L2
	f What is the use of Use-Case diagrams	1	CO3	L2
	g What is the formula for calculating Cyclomatic complexity	1	CO4	L2
	h List any two factors for Software Quality	1	CO4	L1
	i What are the two types of strategies for Risk management?	1	CO5	L2
	j What do you mean by Code walkthroughs?	1	CO5	L2

PART- B

5 X 10 = 50 Marks

		Marks	CO	BL
2.	Explain software myths with examples	10	CO1	L2
	OR			
3	Explain Agile developmental model with a suitable scenario	10	CO1	L2
4	Differentiate functional and non-functional requirements and explain	10	CO2	L2
	OR			
	a Explain requirements validation process.	5	CO2	L2
5	b State the structure of software requirements document in detail.	5	CO2	L2

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|----|---|--|----|-----|----|
| 6 | a | High cohesion and low coupling are preferable. Justify your answer | 5 | CO3 | L2 |
| | b | Explain any two Architectural patterns | 5 | CO3 | L2 |
| | | OR | | | |
| 7 | | Explain the conceptual model of UML with example. | 10 | CO3 | L2 |
| 8 | a | What is the necessity of unit testing? list all unit testing considerations. | 5 | CO4 | L1 |
| | b | Explain system testing with a suitable scenario. | 5 | CO4 | L2 |
| | | OR | | | |
| 9 | a | Explain in detail about system testing? | 5 | CO4 | L2 |
| | b | Differentiate between testing and debugging | 5 | CO4 | L2 |
| 10 | a | List and explain any four types of risks, which can affect software project | 5 | CO5 | L2 |
| | b | Interpret software reviews and inspections required for quality assurance. | 5 | CO5 | L2 |
| | | OR | | | |
| 11 | | Define software reliability. List the three categories of McCall quality factors | 10 | CO5 | L2 |
