

Code: 23CS3403, 23IT3403

**II B.Tech - II Semester – Regular / Supplementary Examinations
APRIL 2026**

**SOFTWARE ENGINEERING
(Common for CSE, IT)**

Duration: 3 hours

Max. Marks: 70

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- Note: 1. This question paper contains two Parts A and B.
2. Part-A contains 10 short answer questions. Each Question carries 2 Marks.
3. Part-B contains 5 essay questions with an internal choice from each unit. Each Question carries 10 marks.
4. All parts of Question paper must be answered in one place.

BL – Blooms Level

CO – Course Outcome

PART – A

		BL	CO
1.a)	List the characteristics of good software.	L1	CO1
1.b)	Define Incremental Model with neat diagram.	L1	CO1
1.c)	How COCOMO model will be used for estimation.	L1	CO1
1.d)	Define Risk Identification.	L1	CO2
1.e)	What is Modularity in software design?	L1	CO3
1.f)	Tell about Object-Oriented Design.	L1	CO3
1.g)	What is Integration Testing?	L1	CO3
1.h)	Define Software Quality.	L1	C03
1.i)	What is Software Maintenance?	L1	CO4
1.j)	Sketch architecture of CASE environment.	L3	CO4

PART – B

			BL	CO	Max. Marks
UNIT-I					
2	a)	Explain Agile development models in detail.	L2	CO1	5 M
	b)	Describe the Waterfall model in detail with advantages and limitations.	L2	CO1	5 M
OR					
3	a)	Explain RAD models and its applicability with neat diagram.	L2	CO1	5 M
	b)	Describe exploratory style of software development with example.	L2	CO1	5 M
UNIT-II					
4	a)	Explain Software Project manager responsibilities and complexities.	L2	CO2	5 M
	b)	Demonstrate project planning activities in Software Project Management.	L3	CO2	5 M
OR					
5	a)	Explain Risk Analysis and Risk Mitigation strategies.	L2	CO2	5 M
	b)	Illustrate Empirical and Heuristic estimation techniques with examples.	L3	CO2	5 M
UNIT-III					
6	a)	Interpret about Function Oriented Design.	L3	CO3	5 M

	b)	Discuss Cohesion and Coupling with suitable examples.	L2	CO3	5 M
OR					
7	a)	Explain Structured Analysis methodology and DFD with example.	L2	CO3	5 M
	b)	Describe principles and golden rules of good User Interface Design.	L2	CO3	5 M
UNIT-IV					
8	a)	Demonstrate Black-box testing and White-box testing.	L3	CO3	5 M
	b)	Explain smoke Testing with suitable example.	L2	CO3	5 M
OR					
9	a)	Explain Software Quality and reliability.	L2	CO3	5 M
	b)	Discuss ISO 9000 certification process and quality standards.	L2	CO3	5 M
UNIT-V					
10	a)	Illustrate about CASE tools and their role in software development.	L3	CO4	5 M
	b)	Discuss reverse engineering and its uses.	L2	CO4	5 M
OR					
11	a)	Illustrate about Test case generator and its importance.	L3	CO4	5 M
	b)	Describe estimation of maintenance cost with suitable methods.	L2	CO4	5 M