

Code: 23CS3403, 23IT3403

II B.Tech - II Semester – Regular Examinations - MAY 2025**SOFTWARE ENGINEERING**
(Common for CSE, IT)**Duration: 3 hours****Max. Marks: 70**

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)	How has software development evolved?	L1	CO1
1.b)	What are the core values and principles of Agile development model?	L1	CO1
1.c)	What are the critical elements of software project planning?	L2	CO2
1.d)	What are the key advantages of empirical estimation techniques?	L1	CO2
1.e)	Define design process.	L2	CO3
1.f)	What is a Data Flow Diagram (DFD)?	L1	CO3
1.g)	Define system testing.	L1	CO3
1.h)	What is the importance of software documentation?	L1	CO4
1.i)	What is software reverse engineering?	L1	CO4
1.j)	What are the major factors affecting software maintenance costs?	L1	CO4

PART – B

			BL	CO	Max. Marks
UNIT-I					
2	a)	Describe Waterfall model advantages and disadvantages.	L2	CO1	5 M
	b)	Write a short note on Software development projects.	L1	CO1	5 M
OR					
3	a)	Discuss rapid application development model.	L2	CO1	5 M
	b)	Explain Exploratory style of software development.	L2	CO1	5 M
UNIT-II					
4	a)	Summarize the Responsibilities of a Software Project Manager.	L2	CO1	5 M
	b)	Explain about COCOMO a Heuristic Estimation Technique.	L2	CO1	5 M
OR					
5	a)	Discuss about Metrics for Project Size Estimation.	L2	CO2	5 M
	b)	What are the key challenges in gathering accurate and complete software requirements from stakeholders?	L2	CO2	5 M
UNIT-III					
6	a)	What are the key characteristics of a good software design? Explain	L2	CO3	5 M

	b)	Discuss Shneiderman's Golden Rules of UI Design.	L2	CO3	5 M
OR					
7	a)	Compare and contrast the different approaches to software design.	L3	CO3	5 M
	b)	Describe the essential characteristics of a good user interface.	L2	CO3	5 M
UNIT-IV					
8	a)	Explain the difference between black-box testing and white-box testing.	L3	CO3	5 M
	b)	Demonstrate the ISO 9000 standard for software quality management.	L2	CO3	5 M
OR					
9	a)	How does testing object-oriented programs, differ from testing procedural programs?	L3	CO3	5 M
	b)	What is debugging? Discuss the common debugging techniques used in software development.	L2	CO3	5 M
UNIT-V					
10	a)	Explain the importance of Computer-Aided Software Engineering in modern software development.	L2	CO4	5 M
	b)	Describe the key characteristics of CASE tools.	L2	CO4	5 M
OR					
11	a)	Explain the characteristics of Software maintenance.	L2	CO4	5 M

	b)	Explain the architecture of a CASE environment.	L2	CO4	5 M
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