CBCS SCHEME

SRI SAIRAM COLLEGE OF ENGINEERING

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BCS755C

Seventh Semester B.E./B.Tech. Degree Examination, Dec.2025/Jan.2026
Software Engineering

Time: 3 hrs. Max. Marks: 100

Note: 1. Answer any FIVE full questions, choosing ONE full question from each module.
2. M : Marks , L: Bloom's level , C: Course outcomes.

		Module – 1	M	L	C
Q.1	a.	Explain the different activities of a generic process framework for software engineering.	10	L2	CO1
	b.	With necessary sketches, explain two common evolutionary process models.	10	L2	CO1
		OR			
Q.2	a.	Write a short note on following specialized process model. i) Component Based Development ii) Formal Method Model	10	L2	CO1
	b.	With a neat diagram explain unified process with its different phases.	10	L2	CO1
		Module – 2			
Q.3	a.	Define requirement engineering. Why it is necessary? Explain seven distinct tasks of requirement engineering.	10	L2	CO2
	b.	Develop a use-can template description for safe home system considering home owner as a primary Stake-holder.	10	L3	CO2
		OR			
Q.4	a.	Develop following UML diagrams for access camera surveillance via the internet display camera view function : i) Activity diagram ii) Swimlane diagram	10	L3	CO2
	b.	With suitable examples, explain the data modeling concepts covering data objects, data attributes and relationships.	10	L2	CO2
		Module – 3			
Q.5	a.	Define twelve agility principles for those who want to achieve agility.	10	L2	CO3
	b.	With a neat diagram, explain extreme programming process.	10	L2	CO3
		OR			
Q.6	a.	Write a short note on: i) Scrum ii) Feature Driven Development (FDD)	10	L2	CO3
	b.	Explain the different principles that guide each frame work activity.	10	L2	CO3

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		Module – 4			
Q.7	**a.**	With a help of a neat diagram explain translating the requirements model into design model.	**10**	**L2**	**CO4**
	b.	Briefly explain quality guidelines and quality attributes with respect to design process.	**10**	**L2**	**CO4**
		OR			
Q.8	**a.**	Briefly explain the taxonomy of architecture styles.	**10**	**L2**	**CO4**
	b.	Explain the generic structure of architectural context diagram. Also illustrate context diagram for the "Safe Home Security Function".	**10**	**L3**	**CO4**
		Module – 5			
Q.9	**a.**	Write a short note on: i) Garvin's Quality Dimensions ii) Mc.Call's Duality Factors Features	**10**	**L2**	**CO5**
	b.	Explain a reference model for a technical reviews.	**10**	**L2**	**CO5**
		OR			
Q.10	**a.**	Explain the different object oriented testing strategies.	**10**	**L2**	**CO5**
	b.	In detail explain the control structure testing.	**10**	**L2**	**CO5**

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