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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-case 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 framework activity.	10	L2	CO3	

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
