

Q1		Attempt any FIVE	(10)	CO's
1R2	a)	What are software crises and myth?		1
3R2	b)	Enlist any two components of SRS with meaning.		1
4R2	c)	What is the difference between Process Specification and Control Specification?		2
5R2	d)	What is Cohesion and Coupling?		1
6R2	e)	State two points of difference between Reengineering and Reverse Engineering.		1
3R2	f)	Write any two important characteristics of SRS.		1
6R2	g)	Enlist elements of software quality assurance. (any 4)		1
Q2		Attempt any THREE	(12)	
1U4	a)	Describe the RAD model with diagram.		3
2U4	b)	Describe the Decomposition technique of Software Project Management.		2
3U4	c)	Describe Risk Mitigation, Risk Monitoring and Risk Management..		1
1U4	d)	What is Agility development? Describe how The Extreme Programming is commonly used as a agile process model.		2
2R4	e)	What is the role of SCM Repository. Enlist with meaning the database management functions which repository performs or precipitates.		2
Q3		Attempt any THREE	(12)	
4U4	a)	Create a Behavioral model and identify the events with the use-case.		3
4U4	b)	In Control flow model state how an event or control item is implemented as a Boolean value. Also describe the guidelines used for select potential candidate events.		3
5U4	c)	Describe how the requirements model (analysis model) can be translated into a design model with diagram. How this interface is achieved.		3
3U4	d)	Describe how Eliciting requirement helps the user for collecting the requirement (write steps)		2

4U4	e)	Describe UML class diagram and UML sequence diagram for the Actuator-Sensor pattern as it might be applied for the SafeHome function that controls the positioning (e.g., pan, zoom) of a security camera.		1																																										
Q4																																														
Attempt any THREE			(12)																																											
5U4	a)	Distinguish between Architectural design elements and Component level design elements on the basis of SensorManagement (part of the SafeHome security function)		3																																										
6U4	b)	Describe Garvin's eight dimensions of software quality.		4																																										
6U4	c)	What is the purpose of six sigma in software engineering. What are the principles essential while implementing Six Sigma for software.		5																																										
5U4	d)	Describe the Component-Level Design Guidelines for designing class based components.		4																																										
6U4	e)	Describe the guidelines for choosing the right project management method.		4																																										
Q5																																														
Attempt any TWO			(12)																																											
2A6	a)	Justify your answer for the statement "Estimation is the process of finding estimate, or approximation, even if input data may be incomplete, uncertain or unstable"		2																																										
3A6	b)	Study a Project schedule shown in table below and answer the questions : <table border="1"><thead><tr><th>Activity</th><th>Name</th><th>Time (days)</th><th>Activity</th><th>Name</th><th>Time (days)</th></tr></thead><tbody><tr><td>1-2</td><td>A</td><td>4</td><td>5-6</td><td>G</td><td>4</td></tr><tr><td>1-3</td><td>B</td><td>1</td><td>5-7</td><td>H</td><td>8</td></tr><tr><td>2-4</td><td>C</td><td>1</td><td>6-8</td><td>I</td><td>1</td></tr><tr><td>3-4</td><td>D</td><td>1</td><td>7-8</td><td>J</td><td>2</td></tr><tr><td>3-5</td><td>E</td><td>6</td><td>8-10</td><td>K</td><td>5</td></tr><tr><td>4-9</td><td>F</td><td>5</td><td>9-10</td><td>L</td><td>7</td></tr></tbody></table> <p>a) Construct PERT Network b) Compute T_E and T_L for each activity c) Find the critical path</p>	Activity	Name	Time (days)	Activity	Name	Time (days)	1-2	A	4	5-6	G	4	1-3	B	1	5-7	H	8	2-4	C	1	6-8	I	1	3-4	D	1	7-8	J	2	3-5	E	6	8-10	K	5	4-9	F	5	9-10	L	7		4
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4A6	c)	Write a Formal use case for Scenario Based modeling with actor as homeowner in order to "Access camera surveillance via the Internet—display camera views" (ACS-DCV)		3																																										

		enables you to develop models of the information domain and function domain.		
5A6	b)	How different design classes, each representing a different layer of the design architecture, can be developed.		4
5A6	c)	Justify the statement, Considering the elements of the SafeHome product,: “Deployment-level design elements indicate how software functionality and subsystems will be allocated within the physical computing environment that will support the software”.		4