Code No: R1921052 **R19** SET - 1

II B. Tech I Semester Regular Examinations, March - 2021
SOFTWARE ENGINEERING
(Computer Science & Engineering)

Time: 3 hours Max. Marks: 75

Answer any **FIVE** Questions each Question from each unit
All Questions carry **Equal** Marks
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1	a)	What is software process? Elaborate on the changing nature of software in detail.	[8M]
	b)	Explain spiral model with its merits and demerits.	[7M]
		Or	
2	a)	Explain about specialized process models.	[8M]
	b)	Explain software development life cycle. Discuss various activities during SDLC.	[7M]
3	a)	Explain about Agile Process Models.	[8M]
	b)	State and explain various aspects in requirements validation process.	[7M]
		Or	
4	a)	Describe five desirable characteristics of a good software requirement specification document.	[8M]
	b)	Explain the structure of Software Requirements document.	[7M]
5	a)	Explain about Scenario-Based Modeling.	[8M]
	b)	Write about architectural styles and patterns.	[7M]
		Or	
6	a)	Explain about Class based modelling.	[8M]
	b)	Explain interface analysis and interface design steps.	[7M]
7	a)	Distinguish between coupling and cohesion? How do they effect software design?	[8M]
	b)	For a Case study of your choice show the architectural and component design.	[7M]
		Or	
8	a)	List and explain different kinds of architecture styles and patterns.	[8M]
	b)	Explain the process of mapping dataflow into software architecture.	[7M]
9	a)	What is black box testing? Explain the technique specifying rules and its usage with the help of an example.	[8M]
	b)	Explain the COCOMO model for estimation.	[7M]
		Or	
10	a)	Explain the methods of System Testing.	[8M]
	b)	Distinguish between error and failure. Which of the two is detected by testing? Justify.	[7M]
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Code No: R1921052 **R19** SET - 2

II B. Tech I Semester Regular Examinations, March - 2021
SOFTWARE ENGINEERING
(Computer Science & Engineering)

Time: 3 hours Max. Marks: 75

Answer any **FIVE** Questions each Question from each unit
All Questions carry **Equal** Marks
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1	a)	Explain waterfall model with its merits and demerits.	[8M]
	b)	Discuss in brief about different software myths and their consequences.	[7M]
		Or	
2	a)	Explain in detail Evolutionary process model.	[8M]
	b)	Explain the Software Process Framework.	[7M]
3	a)	What is an Agile Process and explain its principles?	[8M]
	b)	Describe five desirable characteristics of a good software requirement specification document?	[7M]
		Or	
4	a)	Explain Extreme Programming (XP) process in detailed.	[8M]
	b)	What are the differences between functional requirements and non-functional requirements?	[7M]
5	a)	Explain about data modelling concepts in detailed with suitable example.	[8M]
	b)	Explain about Flow-oriented modelling and Context-level DFD for the Safe Home security function?	[7M]
		Or	
6	a)	Explain Pattern for Requirement Modelling and Draw a process model showing how a requirements review might be organized with Actuator sensor example.	[8M]
	b)	Discuss about Discovering Analysis Patterns with suitable example.	[7M]
7	a)	What is design? Describe the difference between conceptual design and technical design?	[8M]
	b)	Explain the design guidelines that can be used to produce “good quality” classes or reusable classes.	[7M]
		Or	
8	a)	Define the module coupling and explain different type of coupling.	[8M]
	b)	Discuss the objective of modular software design. What are the effects of module coupling and cohesion?	[7M]
9	a)	List the golden rules of user interface design.	[8M]
	b)	What is software testing? Discuss role of software testing during software lifecycle and why it is so difficult?	[7M]
		Or	
10	a)	What are various kinds of functional testing? Describe any one in detailed.	[8M]
	b)	Describe structural testing in detailed with suitable example.	[7M]
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Code No: R1921052 **R19** SET - 3

II B. Tech I Semester Regular Examinations, March - 2021
SOFTWARE ENGINEERING
(Computer Science & Engineering)

Time: 3 hours Max. Marks: 75

Answer any **FIVE** Questions each Question from each unit
All Questions carry **Equal** Marks
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1	a)	Explain iterative model with its merits and demerits.	[8M]
	b)	A department of computer science has usual resources and usual users for these resources. A software is to be developed so that resources are assigned without conflict. Draw a DFD specifying the above system.	[7M]
		Or	
2	a)	Discuss the significance and use of requirement reengineering. What are the problems in the formulation of requirements?	[8M]
	b)	Give an overview of unified process model.	[7M]
3	a)	What is an Agile Process and explain its principles?	[8M]
	b)	State and explain various aspects in requirements validation process.	[7M]
		Or	
4	a)	Explain about Design Modeling Principles in detailed.	[8M]
	b)	What are the activities of requirements elicitation and analysis? Explain.	[7M]
5	a)	Explain about data modelling concepts in detailed with suitable example.	[8M]
	b)	Write about architectural styles and patterns.	[7M]
		Or	
6	a)	Discuss about data modelling concepts.	[8M]
	b)	Discuss about Discovering Analysis Patterns with suitable example.	[7M]
7	a)	What is design? Describe the difference between conceptual design and technical design?	[8M]
	b)	Define module cohesion and explain different type of cohesion?	[7M]
		Or	
8	a)	What is system modelling? Explain the process of creating models and the factors that should be considered when building models.	[8M]
	b)	Discuss the objective of modular software design. What are the effects of module coupling and cohesion?	[7M]
9	a)	List the golden rules of user interface design.	[8M]
	b)	Explain the various strategies of design. Which design strategy is most popular and practical?	[7M]
		Or	
10	a)	Distinguish between error and failure. Which of the two is detected by testing? Justify.	[8M]
	b)	What is black box testing? Explain the technique specifying rules and its usage with the help of an example.	[7M]
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Code No: R1921052 **R19** SET - 4

II B. Tech I Semester Regular Examinations, March - 2021
SOFTWARE ENGINEERING
(Computer Science & Engineering)

Time: 3 hours Max. Marks: 75

Answer any **FIVE** Questions each Question from each unit
All Questions carry **Equal** Marks
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1	a)	Discuss in brief about different software myths and their consequences.	[8M]
	b)	Explain waterfall model with its merits and demerits.	[7M]
		Or	
2	a)	Explain in detail Evolutionary process model.	[8M]
	b)	Explain software development life cycle. Discuss various activities during SDLC.	[7M]
3	a)	Explain about Agile Process Models its principles?	[8M]
	b)	State and explain various aspects in requirements validation process.	[7M]
		Or	
4	a)	Describe five desirable characteristics of a good software requirement specification document.	[8M]
	b)	Explain Extreme Programming (XP) process in detailed.	[7M]
5	a)	Explain about Flow-oriented modelling and Context-level DFD for the web-based e-marketing system such as “Amazon”?	[8M]
	b)	Write about architectural styles and patterns.	[7M]
		Or	
6	a)	Explain about Class based modelling.	[8M]
	b)	Discuss about Discovering Analysis Patterns with suitable example.	[7M]
7	a)	Distinguish between coupling and cohesion? How do they effect software design?	[8M]
	b)	What is system modelling? Explain the process of creating models and the factors that should be considered when building models.	[7M]
		Or	
8	a)	List and explain different kinds of architecture styles and patterns.	[8M]
	b)	Explain the process of mapping dataflow into software architecture.	[7M]
9	a)	What is white box testing? Explain the technique specifying rules and its usage with the help of an example.	[8M]
	b)	Using a schematic diagram and suitable example to show the order in which the following are estimated in the COCOMO estimate technique: Cost, Effort, Duration, and Size.	[7M]
		Or	
10	a)	What is the purpose of Delphi method? State advantages and disadvantages of the method.	[8M]
	b)	Distinguish between error and failure. Which of the two is detected by testing? Justify.	[7M]
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