Code: 20CS5502

III B.Tech - I Semester - Regular Examinations - NOVEMBER 2023

SOFTWARE ENGINEERING
(MINORS in COMPUTER SCIENCE & ENGINEERING)

Duration: 3 hours   Max. Marks: 70

Note: 1. This paper contains questions from 5 units of Syllabus. Each unit carries 14 marks and have an internal choice of Questions.
2. All parts of Question must be answered in one place.

BL – Blooms Level   CO – Course Outcome

			BL	CO	Max. Marks
		UNIT-I			
1	a)	Explain the waterfall model of the software development process in detail.	L2	CO 1	7 M
	b)	Illustrate SCRUM process flow with neat diagram.	L3	CO 2	7 M
		OR			
2	a)	Explain the nature of software. Analyze the key challenges facing by software engineering.	L2	CO 1	7 M
	b)	Discuss an overview of unified process model with neat diagram.	L2	CO 2	7 M
		UNIT-II			
3	a)	Discuss about the steps required to establish the groundwork for an understanding of requirements.	L2	CO 2	7 M

	b)	Explain the process of requirements gathering in software development.	L2	CO 4	7 M
OR					
4	a)	Define Requirements Elicitation. Explain various activities performed in requirements elicitation phase in brief.	L2	CO 4	7 M
	b)	Describe various approaches of requirement modeling in brief.	L2	CO 2	7 M

UNIT-III

5	a)	What is a design model? Examine the characteristics of a well-formed design model.	L2	CO 1	7 M
	b)	Describe about various architectural styles in detail.	L2	CO 2	7 M
OR					
6	a)	Illustrate how design model can be viewed in different dimensions with neat sketch.	L3	CO 4	7 M
	b)	What is software architecture? Explain the architectural designs for web apps and mobile apps.	L2	CO 1	7 M

UNIT-IV

7	a)	Discuss about various methods of System Testing or Higher order Testing.	L2	CO 1	7 M
	b)	What is white box testing? Illustrate how basis path testing can be done with examples.	L3	CO 4	7 M
OR					

8	a)	Describe the test strategies for conventional Software in detail.	L2	CO 2	7 M
	b)	What is validation? Analyze the components involved in validation testing with appropriate example.	L4	CO 4	7 M

UNIT-V

9	a)	Define the role of risk management in software development process and describe about the risk strategies in detail.	L2	CO 3	7 M
	b)	Discuss about elements of Software Quality Assurance in brief.	L2	CO 3	7 M

OR

10	a)	Analyze how risk projection can be done in detail.	L4	CO 3	7 M
	b)	What are the software quality goals and discuss the corresponding metrics of software quality.	L2	CO 3	7 M