Seat. No. _____

KADI SARVA VISHWAVIDYALAYA

BE SEMESTER-V (CE/IT/CSE) Examination October - 2024

Subject Name: Software Engineering
Subject Code: CT501-N

Date: 17/10/24 **Time: 12:30 pm to 3:30 pm** **Total Marks: 70**

Instructions:
1. Answer each section in separate answer sheet.
2. Use of scientific calculator is permitted.
3. All questions are Compulsory.
4. Indicate clearly, the option you attempt along with its respective question number.
5. Use the last page of main supplementary of rough work.

Section-I

Q-1	**(A)**	Define software engineering. What is the need of software engineering?	[5]
	(B)	Explain software development life cycle with diagram.	[5]
	(C)	What is WebApps? Explain the unique nature of WebApps.	[5]
		OR	
	(C)	What is agility? List the different agile process model and Explain XP programing in details.	[5]
Q-2	**(A)**	Explain incremental process model with diagram and also write advantages of this model.	[5]
	(B)	Draw a sequence diagram for electricity billing system.	[5]
		OR	
Q-2	**(A)**	What is SRS? Explain characteristics of a good SRS.	[5]
	(B)	Explain scrum model with its advantages.	[5]
Q-3	**(A)**	What is requirements elicitation? Explain various activities performed in it.	[5]
	(B)	Define module coupling and cohesion. Explain different types of coupling.	[5]
		OR	
Q-3	**(A)**	Explain functional and non-functional requirements of library management system.	[5]
	(B)	What do you know about CASE tools? Explain in details.	[5]

Section-II

Q-4	**(A)**	Explain unit testing and integration testing strategy.	[5]
	(B)	List and explain requirement engineering tasks.	[5]
	(C)	Draw a data flow diagram for pay-roll information system.	[5]
		OR	
	(C)	Explain FP based software project estimation model with example.	[5]
Q-5	**(A)**	What do you mean by risk? What is software risk? Explain any two types of software risk.	[5]
	(B)	Write a difference between the alpha testing and beta testing.	[5]
		OR	
Q-5	**(A)**	Explain the following terms: Abstraction, Architecture, Modularity, Refinement and Refactoring.	[5]
	(B)	What is pattern based software design? Explain quality attributes of software design.	[5]
Q-6	**(A)**	Explain COCOMO – II model with example.	[5]
	(B)	Provide at least two real-world examples of soft-trends to support your explanation.	[5]
		OR	
Q-6	**(A)**	What is RMMM? Explain in details.	[5]
	(B)	Define software quality assurance (SQA). Explain its importance in the software development lifecycle.	[5]

----------Best of Luck----------