U.S.N.										

B.M.S. College of Engineering, Bengaluru-560019

Autonomous Institute Affiliated to VTU

October 2024 Supplementary Examinations

Programme: B.E. **Semester: IV**
Branch: Information Science and Engineering **Duration: 3 hrs.**
Course Code: 23IS4PCSEG **Max Marks: 100**
Course: Software Engineering

Instructions: 1. Answer any FIVE full questions, choosing one full question from each unit.
2. Missing data, if any, may be suitably assumed.

Important Note: Completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages. Revealing of identification, appeal to evaluator will be treated as malpractice.

			UNIT - I	CO	PO	Marks
1	a)		Software engineers are concerned with developing different kinds of products. Elaborate on types of products in detail.	CO1		5
	b)		Elucidate the major ethical responsibilities of professional software engineers.	CO1		5
	c)		List the process activities followed in software engineering and Discuss any two in detail with suitable diagrams.	CO1		10
			UNIT - II			
2	a)		Quick response to constant changes in the market during the software development process is required by both the organization and the stake holders. Elaborate on how project management is carried out in such projects.	CO2	PO1	5
	b)		Why it is believed that test-first development helps the programmer to develop a better understanding of the system requirements. What are the potential difficulties with test-first development?	CO2	PO1	5
	c)		Extreme programming (XP) is perhaps the best known and most widely used of the agile methods. Elucidate on the principals of XP.	CO2	PO1	10
			UNIT - III			
3	a)		Software Requirement Specification (SRS) is an official document for the software developers. Provide complete SRS structure for “College Management System” application.	CO1		10
	b)		Elaborate on the different types of non-functional requirements with neat diagram.	CO1		10
			OR			
4	a)		Using your knowledge of how an ATM is used, develop a set of use cases that could serve as a basis for understanding the requirements for an ATM system.	CO1		10

		b)	Requirements management needs automated support and the software tools for planning. Elaborate on the tools required and change management.	*CO1*		**10**
			UNIT - IV			
	5	a)	Exemplify the architectural design decisions in detail	*CO3*	*PO2*	**10**
		b)	Discuss the well-known 4+1 view model of software architecture	*CO3*	*PO2*	**5**
		c)	Elucidate how the system architecture and non-functional requirements are related?	*CO3*	*PO2*	**5**
			OR			
	6	a)	Discuss the Model View Controller (MVC) with web application example in detail.	*CO3*	*PO2*	**10**
		b)	Elucidate Transaction processing system architecture along with the ATM system example.	*CO3*	*PO2*	**10**
			UNIT - V			
	7	a)	Explain in detail about the risk management process	*CO1*		**7**
		b)	The effectiveness and efficiency of communications are influenced by various factors. Discuss in detail about the same.	*CO1*		**5**
		c)	Planning a project is a tedious but yet a worth-full job. Discuss the whole process of project planning in detail.	*CO1*		**8**

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