

U.S.N.

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

Autonomous Institute Affiliated to VTU

## July 2024 Semester End Main Examinations

**Programme:** B.E.

**Branch:** Information Science and Engineering

**Course Code:** 22IS5PCSEO

**Course:** Software Engineering and Object-Oriented Modelling Design

**Semester:** V

**Duration:** 3 hrs.

**Max Marks:** 100

**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.			<b>UNIT - I</b>	<b>CO</b>	<b>PO</b>	<b>Marks</b>
	1	a)	Classify the different attributes of good software with an example for each.	CO1	PO2	6
		b)	"Software is a product". Justify this statement with suitable example.	CO1	PO2	6
		c)	Explain how waterfall model and prototyping model can be accommodated in the spiral software process model	CO1	PO2	8
			<b>UNIT - II</b>			
	2	a)	List and explain the differences between sequence diagram and activity diagram. Illustrate with suitable examples	CO2	PO2	10
		b)	Draw the state transition diagram for the following applications: i) Hotel Reservation system ii) Chess game	CO2	PO2	10
			<b>OR</b>			
	3	a)	With clear notations, explain state diagram for Phone line system.	CO2	PO2	10
		b)	Draw the use case diagram for library management s/m make suitable assumptions.	CO2	PO2	10
			<b>UNIT - III</b>			
	4	a)	Define requirement discovery. Explain any two methods of requirement discovery with example	CO3	PO2	10
		b)	List and explain various functional and non-functional requirements for Hostel Management System.	CO3	PO2	10
			<b>UNIT - IV</b>			
	5	a)	With a neat block diagram, explain Software Testing process and list the advantages of Inspections.	CO4	PO2	10
		b)	Identify the Test scenarios involved in <b>Pen Manufacturing</b> process and write any two negative test cases for the same.	CO4	PO3	10

			<b>UNIT - V</b>			
6	a)	Describe briefly the Repository architecture and Client –server architecture with neat diagrams. Discuss advantages and disadvantages of it.	CO5	PO2	<b>10</b>	
	b)	For Online Shopping system development, explain how Agile Technology is better than Traditional SDLC (Software Development Life Cycle)	CO5	PO3	<b>10</b>	
		<b>OR</b>				
7	a)	Explain how the principles underlying agile methods lead to the accelerated development and deployment of software.	CO5	PO2	<b>10</b>	
	b)	Illustrate the repository architecture for a language processing system with a neat sketch and explain in detail.	CO5	PO2	<b>10</b>	

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