



## III B.Tech I Sem Supply End Examination, December 2022

**Software Engineering**

(CSE/IT)

**Time: 3 Hours.****Max. Marks: 70**

Note: 1. Question paper consists: Part-A and Part-B.

2. In Part – A, answer all questions which carries 20 marks.

3. In Part – B, answer any one question from each unit.

Each question carries 10 marks and may have a, b as sub questions.

**PART- A****(10\*2 Marks = 20 Marks)**

- |       |  |    |     |     |
|-------|--|----|-----|-----|
| 1. a) | Define software engineering.   | 2M | C01 | BL1 |
| b)    | Summarize the software myths.  | 2M | C01 | BL2 |
| c)    | Why understanding the requirements is difficult?                                       | 2M | C02 | BL2 |
| d)    | Name any four system models.   | 2M | C02 | BL1 |
| e)    | Suggest the characteristics that serve as a guide for the evaluation of a good design. | 2M | C03 | BL2 |
| f)    | How will the architectural design be evaluated?  | 2M | C03 | BL2 |
| g)    | Differentiate verification and validation.   | 2M | C04 | BL2 |
| h)    | What are the steps of an effective measurement process?                                | 2M | C04 | BL2 |
| i)    | List out the guidelines to be applied for collecting software metrics.                 | 2M | C05 | BL1 |
| j)    | How to assess the consequences of a risk?  | 2M | C05 | BL2 |

**PART- B****(10\*5 Marks = 50 Marks)**

- |      |   |    |     |     |
|------|---|----|-----|-----|
| 2 a) | Examine the activities of a generic process framework for software engineering. | 5M | C01 | BL4 |
| b)   | Show and discuss the approach followed by incremental model.                    | 5M | C01 | BL2 |

**OR**

- |      |   |    |     |     |
|------|---|----|-----|-----|
| 3 a) | Explain various levels of capability maturity model integration                         | 5M | C01 | BL2 |
| b)   | List out and analyze the activities performed in various phases of the unified process. | 5M | C01 | BL4 |
| 4 a) | Distinguish the functional and non-functional requirements.                             | 5M | C02 | BL2 |
| b)   | Interpret the steps involved in creating a behavioral model.                            | 5M | C02 | BL3 |

**OR**

5	a)	Outline and elucidate the content of software requirements document	5M	C02	BL2
	b)	Inspect the guidelines to be followed for requirements elicitation.	5M	C02	BL4
6	a)	Describe the basic concepts of design process and design quality.	5M	C03	BL2
	b)	Elucidate the approach for execution of architectural styles and patterns.	5M	C03	BL3
<b>OR</b>					
7	a)	Analyze the work involved in creating an architectural design.	5M	C03	BL4
	b)	Demonstrate the usage of sequence diagrams and collaboration diagrams.	5M	C03	BL2
8	a)	Diagnose the techniques for the implementation of black-box testing.	5M	C04	BL4
	b)	List out and evaluate different metrics for the analysis model.	5M	C04	BL3
<b>OR</b>					
9	a)	How does an organization combine metrics that come from different individuals or projects? Discuss.	5M	C04	BL3
	b)	Illustrate various system tests that are worthwhile for software-based systems	5M	C04	BL2
10	a)	Compare the reactive risk strategies with proactive risk strategies	5M	C05	BL2
	b)	Elucidate the role of formal technical reviews to achieve quality management	5M	C05	BL3
<b>OR</b>					
11	a)	Explain the basic concepts related to software quality assurance.	5M	C05	BL2
	b)	What can you do to mitigate a risk? Inspect the procedure involved in RMMM plan.	5M	C05	BL4

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**CO - Course Outcome**

**BL - Blooms Taxonomy Levels**