



P.E.S. College of Engineering, Mandya - 571 401

(An Autonomous Institution affiliated to VTU, Belagavi)

Second Semester, Master of Computer Applications (MCA)

Semester End Examination; October - 2022

Software Engineering

Time: 3 hrs

Max. Marks: 100

Course Outcomes

The Students will be able to:

CO1: Identify various types of software process and significance of software process activities.

CO2: Distinguish between different types of software requirements.

CO3: Analyze different system models and architectural models.

CO4: Describe concept of Computer-based, Distributed Software engineering and team work.

CO5: Apply the concept of Project scheduling, Estimation Techniques and Software Testing.

Note: I) Answer any FIVE full questions, selecting ONE full question from each unit.

II) Any THREE units will have internal choice and remaining TWO unit questions are compulsory.

III) Each unit carries 20 marks.

Q. No.	Questions	Marks	BLs	COs	POs
UNIT - I		20			
1 a.	Explain code of ethics principles and key challenges faced by software engineers.	10	L2	CO1	PO1,2
b.	What is extreme programming? Explain the principles and practices of extreme programming.	10	L1,2	CO1	PO1,2
UNIT - II		20			
2 a.	Outline with an example, functional and non-functional requirement.	10	L2	CO2	PO2
b.	Summarize on different dimensions of dependability.	10	L2	CO2	PO2
UNIT - III		20			
3 a.	Explain with a neat diagram structural model.	10	L2	CO3	PO1,2
b.	Describe with a neat diagram behavioral model.	10	L2	CO3	PO1,2
OR					
3 d.	Elaborate on different architectural patterns used in architectural design.	10	L2	CO3	PO1,2
e.	What is object oriented design? Explain different stages involved in it.	10	L1,2	CO3	PO1,2
UNIT - IV		20			
4 a.	Define component. Explain with a neat diagram CBSE process.	10	L1,2	CO4	PO1,2
b.	Elaborate on different patterns associated with distributed system.	10	L2	CO4	PO1,2
OR					
4 d.	Explain with a neat diagram, various phases involved in software project risk management.	10	L3	CO3	PO1,2
e.	Summarize on different factors involved in managing people and team work.	10	L2	CO3	PO2

UNIT - V

20

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|---|----|----|-----|-------|
| 5 a. Explain different techniques used in cost estimation. | 10 | L2 | CO5 | PO1,2 |
| b. Illustrate with a neat diagram Project Planning process. | 10 | L2 | CO5 | PO1,2 |

OR

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|--|----|----|-----|-------|
| 5 d. Explain with a neat diagram project scheduling process. | 10 | L2 | CO5 | PO1,2 |
| e. Explain release testing and component testing. | 10 | L2 | CO5 | PO1,2 |

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