ROLL NO._____ ENROLLMENT NO._____

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Odd semester exam 2024-2025

PAPER: SOFTWARE ENGINEERING **PAPER CODE: MCA 104(Backlog)**
TIME: 2.5 HRS **MAXIMUM MARKS: 60**

Note: Do not write anything on paper except Roll No. & Enrollment No.
Use of mobile phone is not allowed
Please follow proper numbering while answering the questions

Course Outcomes:

CO.1 Understand the key concerns that are common to all software development processes. (Cognitive level: Understand)

CO 2. Be able to select appropriate process models, approaches and techniques to manage a given software development process. (Cognitive level: Analyze)

CO 3. Be able to elicit requirements for a software product and translate these into a documented design. (Cognitive level: Apply)

CO 4. Be able to identify dependability and security issues that affect a given software product creation. (Cognitive level: Create)

CO 5. Understand the role that testing and reuse play in the implementation phase and how these activities relate to the wider software process (Cognitive level: Evaluate)

SECTION A

All questions of Section A are compulsory.
Each question is of 5 marks ***4*5=20 marks***

Q.N.	Question	Marks	CO	BL
1.	This process model couples the iterative nature of prototyping with the controlled and systematic aspects of the linear sequential model. Identify the process model and the software where it is used.	5	CO2	L2
2.	Why do we require alpha and beta testing? What is the difference between alpha and beta testing?	5	CO5	L3
3.	What are the myths and realities about a software for the manager?	5	CO1	L1
4.	What are the advantages of function oriented metrics over size oriented metrics? Is size oriented metrics of no relevance? Why?	5	CO4	L4

SECTION B

Answer any 4 questions out of 6 in Section B
Each question is of 10 marks ***4*10=40 marks***

Q.N.	Question	Marks	CO	BL
1.	Why are evolutionary models better than other software process models? What are their major advantages?	10	CO2	L2

2.	Compare Data Flow Modeling and Class Based Modeling. Draw Level 0 and Level 1 DFD for Secure Home System.	10	CO5	L3
3.	Why do we always strive for high cohesion and low coupling? Explain Cohesion and its types.	10	CO1	L1
4.	Why do we require maintenance for a software? What are the different types of maintenance?	10	CO4	L4
5.	What are the differences between black-box and white-box testing techniques? Explain the different test cases for a web application.	10	CO3	L5
6.	What is a risk? What are the strategies to encounter risk?	10	CO4	L3

BL-Bloom's Taxonomy Levels (1- Remembering, 2- Understanding, 3-Applying, 4-Analysing, 5-Evaluating, 6-Creating)
CO- Course Outcomes