Register No : _____

THE KAVERY ENGINEERING COLLEGE

(An Autonomous Institution)

MCA DEGREE END SEMESTER THEORY EXAMINATIONS, NOV /DEC 2024

First Semester

Master of Computer Applications

PMCT2402 / MC4102 - Object Oriented Software Engineering

Regulations – 2021 & 2024

Duration : 3 Hrs *Maximum : 100 Marks*

*PART – A (ANSWER ALL QUESTIONS) (Marks 10*2=20)*

Q.No	*Questions*	*BLT*	*CO*	*Marks*
1.	List the characteristics of good software.	RE	1	2
2.	Define encapsulation.	RE	1	2
3.	Summarize all the primary tasks in object-oriented analysis.	UN	2	2
4.	Compare objects and classes.	UN	2	2
5.	Define GRASP.	RE	3	2
6.	Outline the principles of GOF.	UN	3	2
7.	Distinguish verification and validation.	AN	4	2
8.	Analyze the need for maintenance.	AN	4	2
9.	List the objectives of risk assessment.	AN	5	2
10.	Compare Boehm's and McCall's model in software quality.	UN	5	2

*PART – B (ANSWER ALL QUESTIONS) (Marks 5*13 = 65)*

Q.No			*Questions*	*BLT*	*CO*	*Marks*
11.	a	i	Compare the waterfall model and Spiral model.	AN	1	6
		ii	Explain object-oriented concepts with suitable examples.	UN	1	7
			Or			
	b	i	Analyze the challenges in software development process.	AN	1	7
		ii	Explain software development life cycle with neat diagram.	UN	1	6
12.	a	i	List and explain the features of SRS.	UN	2	6
		ii	Explain hierarchical object-oriented design.	UN	2	7
			Or			
	b	i	Summarize the object-oriented analysis.	UN	2	6
		ii	Interpret unified modeling language.	UN	2	7
13.	a		Explain design principles and design patterns with an example.	UN	3	13
			Or			
	b		Illustrate static object modeling and dynamic object modeling.	AN	3	13

14.	a	Examine the different levels of testing with an example.	AN	4	13
		Or			
	b	Distinguish static and dynamic testing tools with an example.	AN	4	13
15.	a	List the importance of software estimation and explain Lorenz and Kidd estimation.	UN	5	13
		Or			
	b	Explain measuring software quality and list the advantages of object-oriented metrics.	UN	5	13

*PART – C (Marks 1*15 = 15)*

Q.No		*Questions*	*BLT*	*CO*	*Marks*
16.	a	Develop an interaction diagrams for library management system and discuss the advantages of interaction diagram.	CR	2	15
		Or			
	b	Create an UML diagrams (class, usecase, sequence diagram) for library management system.	CR	2	15