

Sub Code: **R2331054A**

R23

Set No. 1

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY-GURUJADA VIZINAGARAM

III B. Tech I Semester Regular Examinations November -2025

OBJECT ORIENTED ANALYSIS AND DESIGN

(CSE)

Time: 3 hours

Max. Marks: 70

The Question paper consists of Part A & Part B.

Part A is compulsory, Answer all questions. Part B Answers any one question from each unit.

1		PART-A	(20Marks)
	a)	Define the attributes of complex systems.	[2]
	b)	Distinguish between organized and disorganized complexity.	[2]
	c)	What is the importance of modeling?	[2]
	d)	List any four principles of modeling	[2]
	e)	Define advanced classes in UML.	[2]
	f)	What is an interface? Give one example.	[2]
	g)	Define use case diagram.	[2]
	h)	Write any two differences between sequence and collaboration diagrams	[2]
	i)	What is a component diagram?	[2]
	j)	Mention two real-time applications of deployment diagrams	[2]
		PART-B	(50Marks)
		Question from Unit - I	
2	a)	Explain the structure of complex systems with examples.	[5]
	b)	Write about the inherent complexity of software.	[5]
		(OR)	
3	a)	Discuss the attributes of complex systems.	[5]
	b)	Explain “Bringing order to chaos” in software development.	[5]
		Question from Unit - II	
4	a)	Explain the conceptual model of UML.	[5]
	b)	Write the role of architecture in the software development life cycle.	[5]
		(OR)	
5	a)	Define object-oriented modeling with example.	[5]
	b)	Explain the importance and principles of modeling.	[5]
		Question from Unit - III	
6	a)	Explain class diagrams with suitable examples.	[5]
	b)	Discuss advanced relationships in UML.	[5]
		(OR)	
7	a)	Write about interfaces, types, and roles.	[5]
	b)	Explain packages in UML with an example.	[5]
		Question from Unit - IV	
8	a)	Explain the steps to construct a use case diagram with example.	[5]
	b)	Write short notes on activity diagrams.	[5]
		(OR)	
9	a)	Define interactions and interaction diagrams.	[5]
	b)	Write about use cases in behavioral modeling.	[5]
		Question from Unit - V	
10	a)	Define events and signals in UML.	[5]
	b)	Explain the role of state chart diagrams.	[5]
		(OR)	
11	a)	Explain component diagrams with a neat sketch.	[5]
	b)	Write short notes on deployment diagrams.	[5]
