

HALL TICKET NUMBER

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PACE INSTITUTE OF TECHNOLOGY & SCIENCES::ONGOLE  
(AUTONOMOUS)

IV B.TECH I SEMESTER END SUPPLEMENTARY EXAMINATIONS, MARCH-2023  
OBJECT ORIENTED ANALYSIS AND DESIGN WITH UML  
(CSE Branch)

Time: 3 hours

Max. Marks: 60

Note: Question Paper consists of Two parts (Part-A and Part-B)

**PART-A**Answer **all** the questions in Part-A (5X2=10M)

Q.No.	Questions	Marks	CO	KL
1.	a) What is the difference between UML and OOAD?	[2M]	1	2
	b) Difference between nature of object and classes.	[2M]	2	2
	c) Write the importance of Modeling.	[2M]	3	1
	d) Write the purpose of Fork node in UML.	[2M]	4	1
	e) Write the different parts of a state diagram.	[2M]	5	2

**PART-B**Answer **One Question from each UNIT (5X10=50M)**

Q.No.	Questions	Marks	CO	KL
UNIT-I				
2.	a) What is the Role of Decomposition and Abstraction in designing complex software systems? Explain.	[5M]	1	2
	b) Discuss about Evolution and elements of object model.	[5M]	1	2
OR				
3.	a) Discuss clearly about different Models of Object-Oriented Development with a neat sketch.	[5M]	1	4
	b) Explain the attributes of Complex System.	[5M]	1	2
UNIT-II				
4.	a) How does one properly identify the classes and objects that are relevant to a particular application? Explain.	[5M]	2	3
	b) Describe about relationship among objects.	[5M]	2	2
OR				
5.	a) List the meaningful metrics used to know a given class or object is well designed or not? Discuss.	[5M]	2	4
	b) Discuss about interplay of classes and objects.	[5M]	2	2
UNIT-III				
6.	a) Define UML and explain how the architecture of UML meets the requirements of modeling?	[5M]	3	3
	b) Explain why need a model and history of UML.	[5M]	3	2
OR				
7.	a) Discuss an overview of the UML.	[5M]	3	2
	b) Explain the Software development life cycle with a neat diagram.	[5M]	3	2
UNIT-IV				
8.	a) Draw the class diagram for library management system.	[5M]	4	6

	b)	Explain Object diagram with an example.	[5M]	4	2
OR					
9.	a)	Draw and explain the object diagram for social networking site.	[5M]	4	3
	b)	Discuss about packages and interfaces.	[5M]	4	2
UNIT-V					
10.	a)	Prepare an activity diagram that elaborates the details of logging into an email system. Explain the steps with a neat diagram	[5M]	5	6
	b)	Define an event and a signal. Explain briefly about the common modeling techniques of events and signals.	[5M]	5	2
OR					
11.	a)	Define State Diagrams. Draw and explain Sample State diagram for washing machine.	[5M]	5	6
	b)	Explain about Deployment diagram with an example.	[5M]	5	3

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