

**NOIDA INSTITUTE OF ENGINEERING AND TECHNOLOGY, GREATER NOIDA**  
**(An Autonomous Institute)**

**Affiliated to Dr. A.P. J. Abdul Kalam Technical University, Uttar Pradesh, Lucknow**

**Course: B.TECH**

Branch: CSBS

**Semester: IV**

### Sessional Examination: First

Year- (2021. - 2022.)

**Subject Name: Software Design With UML**

**Time: 1.15 Hours**

[ SET- A ]

**Max. Marks:30**

**General Instructions:**

- This Question paper consists of 2 pages & 13 questions. It comprises of three Sections, A, B, and C
- Section A - Question No- 1 is objective type questions carrying 1 mark each, Question No- 2 is very short answer type carrying 2 mark each. You are expected to answer them as directed.
- Section B - Question No-3 is Short answer type questions carrying 5 marks each. Attempt any two out of three questions given.
- Section C - Question No. 4 & 5 are Long answer type questions carrying 6 marks each. Attempt any one part a or b.

		<b>SECTION – A</b>	<b>[08Marks]</b>	
<b>1.</b>	<b>All questions are compulsory</b>		<b>(4×1=4)</b>	
	<b>a.</b> Which of the following feature is also known as run-time binding or late binding? (a)Dynamic typing (b)Dynamic loading (c)Dynamic binding (d)Data hiding.		<b>(1)</b>	<b>CO1</b>
	<b>b.</b> Which of the following definition is incorrect for polymorphism? (a)Polymorphism helps in redefining the same functionality (b)Polymorphism concept is the feature of object-oriented programming (OOP) (c)It always increases the overhead of function definition (d)Ease in the readability of the program		<b>(1)</b>	<b>CO1</b>
	<b>c.</b> Which of the following early OOD methods incorporates both a “micro development process” and a “macro development process.” ? (a) Graddy Booch’s method (b) Rumbaugh method (c) Wirfs-Brock method (d) Coad and Yourdon method		<b>(1)</b>	<b>CO1</b>
	<b>d.</b> An operation can be described (a) Class (b)Object (c)Functions (d)Both A & B		<b>(1)</b>	<b>CO2</b>

2.	<b>All questions are compulsory</b>		(2×2=4)	
	a.	Explain any two features of Object Oriented Paradigm(OOP's).	(2)	CO1
	b.	What is UML.Explain the features of UML	(2)	CO2
<b>SECTION – B</b>			[10Marks]	
3.	<b>Answer any two of the following-</b>		(2×5=10)	
	a.	What is Software Quality. Explain five Software Quality Attributes.	(5)	CO1
	b.	Explain the Structure Thing Element in UML	(5)	CO2
	c.	What is UML? Explain the UML architecture .	(5)	CO2
<b>SECTION – C</b>			[12Marks]	
4	<b>Answer any one of the following-</b>		(1×6=6)	
	a.	Explain the Graddy Booch's Macro development Process	(6)	CO1
	b.	Explain the Elements of UML language	(6)	CO2
5.	<b>Answer any one of the following-</b>		(1×6=6)	
	a.	Explain the Waterfall model in detail with its advantages and disadvantages	(6)	CO1
	b.	What is Object Oriented Design? State the difference between Object Oriented design and Structure Analysis and Design	(6)	CO1