Total No. of Question: 4

PRN No.	

Total No. of Printed Pages: 1

PAPER CODE	U325-234D [E

(AY:2024-25) May 2025 (ENDSEM) EXAM

TY (SEMESTER - II)

COURSE NAME: Professional Elective -III SOFTWARE DESIGN ARCHITECTURE **Branch: COMPUTER ENGINEERING** **COURSE CODE: CSUA32204D**

T.Y PATTERN 2020R1

Time: [1Hr 30 Min] **[Max. Marks: 40]**

Instructions to candidates:

1) **Figures to the right indicate full marks. Use of scientific calculator is allowed**
2) **Use suitable data wherever required**
3) **All questions are compulsory. Solve any two sub question each from Questions 1 , 2 ,3 and 4**

Q. No.	Question Description	Max. Marks	CO mapped	BT Level
Q.1	a) Explain Jackson Structured Design with suitable example.	[5]	1	UNDERSTANDING
	b) Outline and demonstrate steps in Booch method of Object-Oriented Design.	[5]	1	UNDERSTANDING
	c)Illustrate usecase diagrams for any simple software system.	[5]	1	UNDERSTANDING
Q2	a) Demonstrate the proxy pattern with the help of suitable java code	[5]	2	UNDERSTANDING
	b) Illustrate the iterator pattern with the help of simple sequence diagram.	[5]	2	UNDERSTANDING
	c)Classify design patterns with one example of each class.	[5]	2	UNDERSTANDING
Q3	a) Implement model and view in java program using Observer/Observable class/interface in MVC architecture.	[5]	3	APPLY
	b) Identify and handle difficulty in accessing objects in different java virtual machines.	[5]	3	APPLY
	c)Develop the design of the view subsystem in the MVC architecture.	[5]	3	APPLY
Q4	a) Identify and justify different roles of software architects in evaluating Large Scale Distributed System.	[5]	4	APPLY
	b) Apply Architecture Tradeoff Analysis Method for evaluating software architectures of Data Center System.	[5]	4	APPLY
	c) Organize and overview of allocation views for architecture documentation.	[5]	4	APPLY