Hall Ticket Number :										

R-19

Code: 19A57CT

IV B.Tech. I Semester Supplementary Examinations Nov/Dec 2023

Design Patterns

(Computer Science and Engineering)

Max. Marks: 70 Time: 3 Hours

Answer *any five full questions* by choosing one question from each unit (5x14 = 70 Marks)

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			Marks	CO	BL
		UNIT–I			
1.	a)	Illustrate the process of selecting a Design pattern?	7M	CO1	L4
	b)	How design patterns solve design problems?	7M	CO1	L1
		OR			
2.	a)	What is Design pattern? Explain the process of describing the design pattern?	7M	CO1	L2
	b)	How to use a design patterns explain in detail?	7M	CO1	L1
		UNIT–II			
3.	a)	Demonstrate the how to designing a Document Editor	7M	CO2	L2
	b)	Explain about spell checking and Hyphenation?	7M	CO2	L2
		OR			
4.	a)	Discuss about embellishing the user interface in detail.	7M	CO2	L3
	b)	Discuss about Standards which are Supporting Multiple Look-and-Feel In designing a document	7M	CO2	L2
		UNIT–III			
5.		Explain creational patterns & Write in detail about Abstract Factory pattern with example?	14M	CO3	L2
		OR			
6.	a)	Write the Structure, Participants & Implementation details of Builder design pattern?	7M	CO3	L3
	b)	Describe Singleton Pattern in detail?	7M	CO3	L1
		UNIT–IV			
7.	a)	Differentiate between adapter and bridge design pattern.	7M	CO4	L4
	b)	What is the intent and motivation of Façade pattern? Explain.	7M	CO4	L2
		OR			
8.	a)	Explain the collaborations and consequences of Proxy pattern.	7M	CO4	L2
	b)	Explain the Motivation of Flyweight Pattern and when the Flyweight pattern effectively is applicable.	7M	CO4	L2
		UNIT–V			
9.	a)	Illustrate the concept of Template method design pattern with an example?	7M	CO5	L2
	b)	List and explain the consequences of State design pattern?	7M	CO5	L2
		OR			
10.		What is the importance of Mediator design pattern and describe command design pattern with example?	14M	CO5	L1

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Hall Ticket Number :										

R-19

Code: 19A572T

IV B.Tech. I Semester Supplementary Examinations November 2023

Internet of Things

(Computer Science and Engineering)

Max. Marks: 70 Time: 3 Hours

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Answer *five* questions by choosing one question from each unit (5 x 14 = 70 Marks)

			Marks	CO	BL
		UNIT–I			
1.	a)	Discuss in detail on IoT levels and deployment templates?	7M	CO1	L2
	b)	Differentiate between M2M vs IoT?	7M	CO1	L4
		OR			
2.		Describe in detail about IoT system management using NETCONF-YANG?	14M	CO1	L2
		UNIT–II			
3.	a)	Explain ETSI M2M service capabilities in detail with a neat diagram?	7M	CO2	L2
	b)	Draw and Explain the IoT reference model	7M	CO2	L2
		OR			
4.	a)	Explain briefly about reference architecture of IOT with neat diagram?	7M	CO2	L2
	b)	Briefly explain about IoT Functional Model?	7M	CO2	L2
		UNIT–III			
5.	a)	Explain the architecture levels of ZigBee protocols?	7M	CO3	L2
	b)	Explain the unified data standard protocols used for IoT?	7M	CO3	L2
		OR			
6.	a)	Explain SCADA Protocol with example	7M	CO3	L2
	b)	Explain the BACnet Protocol with example?	7M	CO3	L2
		UNIT–IV			
7.		Explain the procedure of Building an IOT with RASPERRY PI with a real time example?	14M	CO4	L2
		OR			
8.		Write a python program to develop a motion activated alarm system using RASPERRY PI?	14M	CO4	L1
		UNIT–V			
9.		Describe the application of Securities and industrial automation in an IoT?	14M	CO5	L2
		OR			
10.		Explain in detail the need and types of Data Analytics for IoT and brief the challenges faced by IoT Data Analytics	14M	CO5	L2

*** End ***

Hall Ticket Number :											R-19

Code: 19A57IT

IV B.Tech. I Semester Supplementary Examinations Nov/Dec 2023

Advanced Web Programming

(Computer Science and Engineering)

Max. Marks: 70 Time: 3 Hours

Answer *any five full questions* by choosing one question from each unit (5x14 = 70 Marks)

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			Marks	CO	BL
		UNIT–I			
1.	a)	Discuss about various functions used in PHP with examples?	7M	CO1	L2
	b)	Compare XAMPP and WAMPP Bundle Servers.	7M	CO1	L4
		OR			
2.	a)	Explain steps of Downloading, installing, configuring PHP.	6M	CO1	L2
	b)	How to handle http request and responses? Explain.	8M	CO1	L1,L2
		UNIT–II			
3.	a)	Write a program to explain about the concept of arrays in PHP.	9M	CO2	L1
	b)	Define operator? Explain different operators used in PHP.	5M	CO2	L1
		OR			
4.	a)	With an example explain the casting of data types in PHP.	6M	CO2	L2
	b)	Briefly Explain about control structures in PHP with illustrations.	8M	CO2	L2
		UNIT–III			
5.	a)	Demonstrate the use of cookies in servlets with an example.	7M	CO3	L3
	b)	Describe how an HTTP Servlet handles its client requests.	7M	CO3	L1,l2
		OR			
6.	a)	What is the difference between GET and POST method in Java Script.	6M	CO3	L1
	b)	Illustrate Preventing Multiple Submissions of a form.	8M	CO3	L3,l4
		UNIT–IV			
7.	a)	Write a PHP script to add and remove users from a MySQL table.	8M	CO4	L1
	b)	With the help of neat diagram, explain the MVC Architecture	6M	CO4	L2
		OR			
8.	a)	Write the steps in Installing PDO, PDO's database support and Connecting to a DB server.	8M	CO4	L1
	b)	What is error handling in Using PDO? Explain.	6M	CO4	L1
		UNIT–V			
9.	a)	What is AJAX? Explain how to implement AJAX with example.	9M	CO5	L1
	b)	Describe the advantages of Servlets over CGI?	5M	CO5	L1,L2
		OR			
10.	a)	List and explain the web servers that support CGI programming.	8M	CO5	L1
	b)	Write short notes on simple Ajax applications	6M	CO5	L1

END