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R-17

Code: 7G189

IV B.Tech. II Semester Supplementary Examinations Nov/Dec 2022

Design Patterns Through JAVA

(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)

		Marks	CO	Blooms Level
UNIT-I				
1.	a) Define Abstract Parent Class. Write the java code to create Concrete Employee Sub classes.	7M	CO1	L1,L6
	b) What is a class? Explain its role in design patterns.	7M	CO1	L2
OR				
2.	What is Design pattern? List the similarities and differences between Design Patterns and Frameworks.	14M	CO1	L1
UNIT-II				
3.	When can we use the factory method? Draw and explain the structure of the factory method with an example	14M	CO2	L3
OR				
4.	Define Creational Patterns. List and explain the implementation issues for singleton pattern.	14M	CO2	L1
UNIT-III				
5.	Explain the liabilities and benefits of decorator pattern. Also mention the issues to be considered while implement it	14M	CO3	L2
OR				
6.	Write the characteristics of a Proxy object. List and explain different Proxy Types.	14M	CO3	L2
UNIT-IV				
7.	a) Explain why Mediator is called as a Communication Hub with an example.	7M	CO4	L2
	b) Explain about composite and flyweight creational patterns	7M	CO4	L2
OR				
8.	Where Memento patterns are used? Explain about DataConverter and MementoHandler.	14M	CO4	L2
UNIT-V				
9.	a) Define Critical Section? Explain Static Early Initialization approach with an example	7M	CO5	L2
	b) Briefly explain object authenticator.	7M	CO5	L2
OR				
10.	Design an application for library using Read-Write Lock pattern.	14M	CO5	L6

END

Hall Ticket Number :										
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R-17

Code: 7G185

IV B.Tech. II Semester Supplementary Examinations November 2022

Software Architecture

(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)

	Marks
UNIT-I	
1. a) Describe the architectural structure of a system?	7M
b) Briefly explain what does the software architecture constitute	7M
OR	
2. a) Write about status of software architecture	7M
b) What are the features of good architecture	7M
UNIT-II	
3. a) Explain the process control paradigm with various process control definitions.	8M
b) Write a note on Heterogeneous architecture.	6M
OR	
4. a) What are the basic requirements for a mobile robot's architecture? How the Implicit Invocation model handle them.	10M
b) Define Registers.	4M
UNIT-III	
5. a) Explain in detail about database integration in shared information systems.	7M
b) Write about architectural structure for shared information systems.	7M
OR	
6. Explain in detail about architectural design guidance for world wide web case study	14M
UNIT-IV	
7. a) Define reflection architectural pattern. Explain the dynamics of the same.	7M
b) Explain about structural Patterns in detail	7M
OR	
8. a) Build the steps in pattern, from mud to structure.	7M
b) Summarize the process of Architecture style in detail.	7M
UNIT-V	
9. Write in detail about universal connector language	14M
OR	
10. How to create products and evaluating a product line? Explain	14M
