Reg. No. : | | | | | | | | | | | | |

Question Paper Code: U3C02

B.E. / B.Tech. DEGREE EXAMINATION, NOV 2023

Fourth Semester

Computer Science and Business Systems

21UCB402-SOFTWARE DESIGN WITH UML

(Regulations 2021)

Duration: Three hours | Maximum: 100 Marks

Answer ALL Questions

PART A - (10 x 2 = 20 Marks)

1.	What are the three ways to apply UML?	CO1- U
2.	Define a) Actors, b) Scenarios, and c) Use cases.	CO1- U
3.	Define Elaboration	CO2- U
4.	Define an attribute. Explain with an example using UML notation	CO2- U
5.	Define State Chart Diagram.	CO3- U
6	Compare and Contrast asynchronous and synchronous message.	CO3- U
7	What is GOF?	CO4- U
8	What are the steps for mapping design to code?	CO4- U
9	Differentiate OO integration testing and OO system testing	CO5- U
10	What is OMT?	CO5- U

PART – B (5 x 16= 80 Marks)

11.	(a)	Analyze and Model a usecase diagram for the following scenario: Deepthi super market wants a subsystem to process supply orders via the web .the user will supply via a from their name ,passwords ,account no and list of supplies along with an indication of the quantities desired .the subsystems will validate the order number, expected shift date and the total cost of the order. If the validation step fails, the subsyste3m will generate an error message describing the cause of the failure.	CO1- App	(16)

Or

	(b)	Write a problem statement for Hospital Management. To develop use case diagram and discover the use case and actors of this system	CO1- App	(16)
12.	(a)	Write a problem statement for Ticket Reservation System. To develop Class diagram and discover the notation of this system	CO2- App	(16)
	(b)	Write a problem statement for Online Stock Brokerage System. To develop Class diagram and discover the notation of this system	CO2- App	(16)
13.	(a)	Write a problem statement and to develop interaction diagram, component diagram and deployment diagram for online stock brokerage system	CO3- App	(16)
		Or		
	(b)	Write a problem statement and to develop interaction diagram, component diagram and deployment diagram for movie ticket system.	CO3- App	(16)
14.	(a)	Explain 'Information Expert' with an example	CO4- U	(16)
		Or		
	(b)	Explain Adapter pattern with a diagram	CO4- U	(16)
15.	(a)	Explain briefly the four phases of OMT model. Explain with example OMT Functional Model	CO5- U	(16)
		Or		
	(b)	Compare unit testing and Integration testing in OO Testing.	CO5- U	(16)