

PRESIDENCY UNIVERSITY BENGALURU

School Of Computer Science and Engineering & Information Science

End-Term Examinations, Aug 2024

Odd Semester: 2023 - 24

Course Code: CSE 3082

Course Name: Object Oriented Analysis and Design

Department: Computer Science and Engineering

Date: 8/8/2024

Time: 9:30am to 12:30pm

Max Marks: 100

Weightage: 50%

Instructions:

(i) Read the all questions carefully and answer accordingly.

(ii) Do not write any matter on the question paper other than roll number.

Q.N o	Questions	Mark s	СО	RBT
	a. Define object.	4	CO1	L1
1	b. What is Object Oriented Analysis and Design	6	CO1	L2
	c. Illustrate object oriented software development life cycle with neat sketch.	10	CO1	L3

OR

	a. Define class.	4	CO1	L1
2	b. List the four phases of Rumbaugh Object Modeling Techniques.	6	CO1	L2
	c. Illustrate Jacobson Methodology with appropriate examples in detail	10	CO1	L3

	a. Define use case diagram.	4	CO2	L1
	b. List out the various approaches for identifying classes.	6	CO2	L2
3	c. A store wants to automate its inventory. It has point-of-sale terminals that can record all of the items and quantities that a customer purchases. Another terminal is also available for the customer service desk to handle returns. It has a similar terminal in the loading dock to handle arriving shipments from suppliers. The meat department and produce department have terminals to enter losses/discounts due to spoilage. Choose Noun phrase approach for identifying the objects from the grocery store problem.	10	CO2	L3

OR

	a.	Define class diagram.	4	CO2	L1
4	b.	List the five rules for identifying bad design.	6	CO2	L2
	C.	Explain various common class pattern approach and the guidelines for identifying super sub relationship	10	CO2	L3

5	a. Define State-chart diagram.	4	CO3	L1
3	b. Write the Corollaries types and its use	6	CO3	L2

	c. Sketch the class diagram and Use case diagram for car rental systems.	10	CO3	L3
	OR			
	a. Describe activity diagram.	4	CO3	L1
6	b. Define Axiom, and various types of axioms.	6	CO3	L2
	c. Define corollaries, and various levels of corollaries.	10	CO3	L3
	a. Define black box testing.	4	CO4	L1
7	b. Explain testing and DBMS.	6	CO4	L2
	c. Sketch the component diagram and deployment diagram for Course Registration System.	10	CO4	L3
	OR			
	a. State the benefits of access layer classes.	4	CO4	L1
8	b. Describe the four major activities of designing view layer classes.	6	CO4	L2
	c. Sketch the component diagram and deployment diagram for railway ticket reservation system.	10	CO4	L3
	a. Define Verification and Validation.	4	CO1	L1
	b. Define Tangible things and device classes.	6	CO2	L2
9	c. The Flight Reservation System is an essential tool for managing fligh bookings and reservations. The system offers several features including the ability to select flights, book flights, cancel bookings search for flights, view flight details, add flights, edit flights, and cance flights. The first step in the system is to select a flight. Customers car search for flights based on various criteria, such as departure and arrival locations, dates of travel, and airline preferences. This feature ensures that customers can find a flight that suits their needs and preferences. Once customers have selected a suitable flight, they can book the flight using the system. The system allows customers to provide their personal and payment information, select the seat they want, and specify any additional services they require, such as baggage handling or in-flight meals. Customers can also specify any special requests on preferences they have, such as a window seat or a vegetarian meal. This feature ensures that customers can customize their flight according to their needs and preferences. If customers need to cancel their booking, they can do so using the system. The system allows customers to cancel their booking quickly and easily, without the need to contact the airline directly. This feature ensures that customers have flexibility and control over their bookings and can adjust their plans as needed. Finally, if airlines need to manage their flight schedules, they can add, edit, or cancel flights using the system. This feature ensures that airlines can manage their flight operations efficiently and effectively, and respond quickly to changes in demand or other factors. Sketch the sequence diagram and collaboration diagram for the above given scenario.	10 10 10 10 10 10 10 10 10 10 10 10 10 1	CO3	L3
	OR	T ,		
40	a. Define prototyping.	4	CO4	L1
10	b. Name five Booch diagrams.	6	CO1	L2
	c. Explain Quality assurance Tests .Illustrate various testing strategies	10	CO3	L3