

Roll No



**PRESIDENCY UNIVERSITY
BENGALURU**

**SCHOOL OF ENGINEERING
END TERM EXAMINATION - JUN 2023**

Semester : Semester IV - 2021

Course Code : CSE3082

Course Name : Sem IV - CSE3082 - Object Oriented Analysis and Design

Program : CAI,CEI,COM,CST&CSG

Date : 16-JUN-2023

Time : 9.30AM - 12.30PM

Max Marks : 100

Weightage : 50%

Instructions:

- (i) Read all questions carefully and answer accordingly.*
- (ii) Question paper consists of 3 parts.*
- (iii) Scientific and non-programmable calculator are permitted.*
- (iv) Do not write any information on the question paper other than Roll Number.*

PART A

ANSWER ALL THE QUESTIONS

(10 X 2 = 20M)

1. What are benefits of inheritance?
(CO1) [Knowledge]
2. Draw a Deployment diagram for Passport automation system.
(CO4) [Knowledge]
3. What are the types of messages in sequence diagram?
(CO3) [Knowledge]
4. List out the components involved in Interaction Diagram.
(CO3) [Knowledge]
5. Comparison between extends and includes use case relationship.
(CO2) [Knowledge]
6. What are the Benefits of Access Layer Classes?
(CO4) [Knowledge]
7. Define Association. Give an example for Aggregation.
(CO1) [Knowledge]
8. Differentiate between verification and validation.
(CO4) [Knowledge]
9. Mention the four major phases of Unified Approach.
(CO2) [Knowledge]

10. What is the use of Corollary 1 and Corollary 2?

(CO3) [Knowledge]

PART B

ANSWER ALL THE QUESTIONS

(5 X 10 = 50M)

11. What is Use case diagram? Differentiate between Sequence diagram and Activity diagram. Draw a Sequence diagram for Railway Ticket reservation systems which should include reservation facility, Transaction processing and Cancellation facility.

(CO3) [Comprehension]

12. Testing is process of executing a program with the intent of finding errors. A good test case is one that has a high probability of detecting an as-yet undiscovered error A successful test case is one that detects as as-yet undiscovered error. Discuss the guidelines for developing Quality Assurance tests. List out the different type of testing in Quality Assurance tests.

(CO4) [Comprehension]

13. Design and Illustrate the Use case model for activities involved in ordering food in a restaurant from the point when the customer enters a restaurant to the point when he leaves the restaurant.

(CO2) [Comprehension]

14. The site user and the webmaster are the actors of the UML diagram. The site user wants to search for documents, browse documents, and view events. These are the functionality the user wants to do. The download and preview documents are the use cases too, and they are in relation to each other based on user requirements. The webmaster upload documents, post new events to the homepage and add a user and these use cases are in relation with the managed folders and add company but still based on what the actor wants. Draw use case diagram for the above scenario.

(CO1) [Comprehension]

15. Imagine an online movie booking system where users can browse movie listings, select seats, make reservations, and cancel bookings. The system also handles payment processing. Draw the activity and state chart diagrams to illustrate the flow of activities and the different states that the system and its entities go through during the movie booking process.

(CO3) [Comprehension]

PART C

ANSWER ALL THE QUESTIONS

(2 X 15 = 30M)

16. Consider an Online Shopping scenario. After the customer adds things to his cart through the e-commerce website and finalizes his shopping, he is led to the payment portal. The web server is connected with the database server, which includes the product's information and the history and information about online shopping. Depict the scenario using a deployment diagram

(CO4) [Application]

17. Consider an online food ordering system where customers can browse a menu, select items, place orders, and make payments. The system collaborates with restaurants for menu updates and delivery services for order fulfillment. Draw the sequence and collaboration diagrams to illustrate the interactions between the different entities involved in the online food ordering process.

(CO3) [Application]