

Roll No



**PRESIDENCY UNIVERSITY
BENGALURU**

**SCHOOL OF ENGINEERING
MID TERM EXAMINATION - APR 2023**

Semester : Semester IV - 2021

Course Code : CSE3082

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

Program : CAI,CCS,COM,CSE,CEI,CIT,CSG,CIT

Date : 17-APR-2023

Time : 9:30AM - 11AM

Max Marks : 50

Weightage : 25%

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

(5 X 2 = 10M)

1. Design Incremental Testing for a calculator. (CO1) [Knowledge]
2. Compare extends and includes use case relationship. (CO1) [Knowledge]
3. What are Three Strategies to find Conceptual Classes? (CO1) [Knowledge]
4. Write the concept of Inheritance and its types. (CO2) [Knowledge]
5. Define generalisation and specialisation. (CO2) [Knowledge]

PART B

ANSWER ALL THE QUESTIONS

(5 X 4 = 20M)

6. Arjun is very much interested in testing. Kindly help him to understand the various types of testing with a neat diagram. (CO1) [Comprehension]
7. List and explain 3 transformation of software development process (CO1) [Comprehension]
8. Illustrate in detail about the concept of Inheritance and its types with examples (CO1) [Comprehension]

9. Write short notes on CRC approach with a neat diagram

(CO2) [Comprehension]

10. Apply common class pattern approach for Elevator system.

(CO2) [Comprehension]

PART C

ANSWER ALL THE QUESTIONS

(2 X 10 = 20M)

11. Hospital Reception system is a software system which supports many responsibilities of hospital receptionist. Receptionist schedules patient's appointments and admission to the hospital, collects information from patient upon patient's arrival and/or by phone. For the patient that will stay in the hospital ("inpatient") s/he should have a bed allotted in a ward. Receptionists might also receive patient's payments, record them in a database and provide receipts, file insurance claims and medical reports. Draw a use case diagram showing relationships between different use cases

(CO1) [Application]

12. A Library lends books and magazines to member, who is registered in the system. It also maintains the purchase of new books and magazines for the Library. A member can reserve a book or magazine that is not currently available in the library, so that when it is returned or purchased by the library, that person is notified. The library can easily create, replace and delete information about the books, members, and reservation in the system. The books transactions are stored in the database. Analyze the users and actors of this system, and the interactions between them must be depicted. Draw the use case diagram.

(CO2) [Application]