

M.C.A. DEGREE EXAMINATION, APRIL/MAY/ 2013

(Regulation 2009)

Fourth Semester

MC9248– CASE Tools Lab

Time: Three hours

Maximum: 100 marks

1. Draw the following diagrams for ATM machine using any CASE Tool: (100)
- Class diagram
 - Component diagram
 - Deployment diagram

The class diagram must show the relationships among the classes user, ATM machine, Account and Transaction. The classes must have attributes and operations. State the purpose of classes, operations and attributes.

2. Draw the following diagrams for ATM machine using any CASE Tool: (100)
- Use case diagram
 - Sequence diagram
 - Collaboration diagram

Analyze the need for the use cases.

3. Develop a project for Library Management system. The user must be able to browse, borrow and return books. The administrator must be able to add new books. Also design use case diagram for the same. (100)

4. Analyze the requirements of the project Student Marks Analyzing System. The project must contain forms for student personal information, student mark details. Perform software testing. (100)

5. Create a dictionary with the following features: (100)

- To add entries into the dictionary
- To list the words present in the dictionary in the order of alphabets
- To look up to 3 synonyms for a word.

Perform Testing.

6. Create a Telephone directory to support the following: (100)

- Facilitate display of various details when the user gives the name of the person
- Facilitate display of various details when the user gives the phone number.
- Facilitate categorizing user names as residential and business.

Draw Sequence and collaboration diagrams.

7. Analyze and design a project for Inventory control to keep track of stocks in an industry. Its main purpose is to update stock when it reaches an optimum level. Perform the following operations: (100)

- Selection of items from the list.
- Addition of item and deletion of item.
- Updating of stock.
- View the available stock.

8. Define a class Student. The class Result inherits Marks and class Marks inherits Student. All the classes contain data members and member functions. Generate source code in C++ and update the code and execute. Add Sports Marks in the Marks class and Reverse Engineer. (100)

9. Write a program in C++ to perform Arithmetic operations and generate class diagram from the code. (100)

10. Perform Business planning and modeling for Bank ATM system. (100)

11. Implement all the phases of the software development life cycle for Railway Reservation system. The system must have cancellation and reservation forms. (100)

12. Create class diagrams using any CASE Tool for Employee payroll system and generate the code in VB automatically. Update the VB code by adding forms and module for database connectivity. Execute the program. (100)

13. Create class diagrams using any CASE Tool for Library Management system and generate the code in VB automatically. Update the VB code by adding forms and module for database connectivity. Execute the program. (100)

14. Create class diagrams using any CASE Tool for Inventory control system and generate the code in VB automatically. Update the VB code by adding forms and module for database connectivity. Execute the program. (100)

15. Draw the following diagrams for Railway Reservation System using any CASE Tool:

- Class diagram
- Component diagram
- Deployment diagram

The class diagram must show the relationships among the classes. The classes must have attributes and operations. State the purpose of classes, operations and attributes. (100)

16. Draw the following diagrams for Railway Reservation System using any CASE Tool:

- Use case diagram
- Sequence diagram
- Collaboration diagram

Analyze the need for the use cases. (100)

17. Develop an application for Payroll processing using any CASE tool (100)

- a) Add, Update and Delete Employee Details and salary details
- b) If we give the Employee ID it has to display the employee and salary detail

- Draw the sequence diagram for the above scenario.
- Verify and Validate the implementation

18. Write a program in C++ to calculate simple and compound interest and generate class diagram from the code. (100)

19. Analyze and develop an application for Online Railway Reservation System. (100)

- a) Check the Availability
- b) If Available then Reserve the ticket

- Draw the activity diagram for the above scenario.
- Perform Testing using any tool

20. Analyze and develop an application for Online Railway Reservation System. (100)

- a) Generate seat no, PNR Number and Reserve the ticket
- b) Cancellation of ticket based on PNR Number only.

- Draw the sequence diagram for the above scenario.
- Perform Testing using any tool