MCSL-036 (Set-1)

MASTER OF COMPUTER APPLICATIONS/POST GRADUATE DIPLOMA IN COMPUTER APPLICATIONS (MCA/PGDCA)

Lab Course (For OOAD, Software Engineering, Accountancy and Financial Management)

Duration: 3 hours   Maximum Marks: 100

Note: 1. There are three Sections in this paper.

2. Each Section is for one-hour duration including the viva-voce.

3. Answer all the questions in each Section.

4. Section A and Section B carry 25 marks each for the problem(s) and 5 marks for viva-voce. Section C carries 30 marks for the problem(s) and 10 marks for viva-voce.

5. Attempt only that part(s) in which you are not yet successful.

Section-A

(Object Oriented Analysis and Design)

1.   A software company wants to develop a Car on Rent booking app having the following features:

- Registration/Login
- Real-time tracking
- End of the trip option
- Cash payment option/online payment option
- Review and rating system

You are required to do the following:

a) Draw the use case diagram. (5)

b) Define all the classes and draw the class diagram. (10)

c) Draw the sequence and collaboration diagrams. (10)

Section-B

(Software Engineering)

2. Perform the following activities for the problem given in Q. 1 in section A:

a) Draw the DFDs at level 0 and level 1. (5)

b) Write Pseudocodes for two processes defined at level 1 of the DFD. (10)

c) Draw an E-R diagram of the above problem (Q 1). Convert the E-R diagram into relational tables showing the integrity constraints and relationship between entities. (10)

Section-C

(Accountancy and Financial Management)

3. Post the following transactions of a car on rent company to prepare journal, Ledger and Trial Balance: (30)

April,2023	Transactions	Amount (INR)
7th	Started the business with cash	6,00,000.00
11th	Deposited in the bank	2,00,000.00
14th	Items purchased on credits	1,15,000.00
17th	Received online payment for the rent service	1,00,000.00
25th	Received payment in cash	75,000.00
27th	Paid salary	60,000.00
30th	Paid rent (parking)	25,000.00

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