

MCSL-036 (Set-2)

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 an app for medical store having the following features:

- Registration/Login
- 24 hours medicine purchase facility
- Discount facility to customers
- 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. (7)
 - b) Write pseudocodes for two processes defined at level 1 of the DFD. (8)
 - 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 online Medical Shop to prepare the Journal, Ledger and Trial Balance: (30)

April,2023	Transactions	Amount (INR)
8 th April	Started the business with cash	1,90,000.00
10 th April	Deposited in the bank	50, 000.00
12 th April	Purchased medicines on credit	35,000.00
16 th April	Purchased medical equipment on credit	40,000.00
20 th April	Sold medicines for cash	30,000.00
23 th April	Sold medicines on credit	55,000.00
25 th April	Paid salary to staff	25,000.00
30 th April	Paid rent	15,000.00
