

MCSL-036 (Set-3)

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. An E-commerce company offers a wide range of online services to customers through the company's website. One needs to register first with the company's website. After obtaining the ID and the password previously setup, one accesses the online facilities of the company. The following online services are available:

- Purchasing various items listed on company's website.
- To provide dispatch status.
- Update information about new arrivals of items.
- Online payment facility
- Review and rating facility

Perform the following activities for the problem described above:

- a) Draw the use case diagram. (5)
- b) Define all the classes and draw a 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 an E-commerce company to prepare the Journal, Ledger and Trial Balance: (30)

May, 2023	Transactions	Amount (INR)
6 th	Started an E-commerce company with cash	5,00,000.00
9 th	Deposited in the bank	2,00,000.00
15 th	Items purchased on credit (Computer, S/W and furniture) in cash	1,75,000.00
19 th	Received online payment	65,000.00
24 th	Received payment in cash	50,000.00
27 th	Paid salary	85,000.00
30 th	Paid rent	45,000.00
