

No. of Printed Pages : 3 **MCSL-036(Set-I)**

**MASTER OF COMPUTER
APPLICATIONS (MCA)**

Term-End Practical Examination

December, 2024

**MCSL-036(Set-I) : LAB COURSE (FOR OOAD,
SOFTWARE ENGINEERING, ACCOUNTANCY AND
FINANCIAL MANAGEMENT)**

Time : 3 Hours

Maximum Marks : 100

Note : (i) *There are three Sections in this paper.*

(ii) *Each session is for one hour duration including the viva-voce.*

(iii) *Answer all the questions in each Section.*

(iv) *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.*

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

Section—A
(Object Oriented Analysis and Design)

1. An online platform allows student to access courses, submit assignments, and take quizzes. Instructors can upload materials, assign tasks, and grade submissions. Student and instructors need to register before using the system.

Perform the following tasks for the problem described above :

- (a) Draw the usecase diagram for the system. 5
- (b) Define all the classes and draw the class diagram. 10
- (c) Draw the sequence and collaboration diagrams for a student submitting an assignment. 10

Section—B
(Software Engineering)

2. Based on the system described in Section A, perform the following tasks :
- (a) Draw the DFD at level 0 and level 1 for the system. 7
 - (b) Write pseudocode for any two processes defined at level 1 of the DFD. 8
 - (c) Draw the E-R diagram and convert it into relational tables showing the integrity constraints. 10

Section—C**(Accountancy and Financial Management)**

3. The following transactions are recorded for an online learning company :

2023 January	Transaction Description	Amount (INR)
1	Started business with cash	8,00,000
5	Purchased Computers on credit	1,00,000
10	Received payment from online course sales	1,50,000
15	Paid for course content development	50,000
20	Paid rent	25,000
25	Paid salary to employees	75,000

Perform the following tasks : 30

Post the transactions to the Journal, prepare the ledger, and generate the Trial Balance.

× × × × × × ×