

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

**MASTER OF COMPUTER
APPLICATIONS (MCA)**

Term-End Practical Examination

December, 2024

**MCSL-036(Set-II) : 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. A hotel offers online room booking facilities. Customers can browse available rooms, check prices and book rooms by selecting the check-in and check-out dates. Once a room is booked, an invoice is generated and sent to the customer. Customers can also cancel bookings.

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 room booking process. 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 two processes at level 1 of the DFD. 8

- (c) Draw the E-R diagram, convert it into relational tables showing the integrity constraints. 10

Section—C

(Accountancy and Financial Management)

3. The following transactions are recorded for a hotel business :

2023 February	Transaction Description	Amount (INR)
1	Started business with cash	12,00,000
5	Purchased Furniture on credit	1,50,000
10	Room booked via online payment	3,00,000
15	Paid for advertisement	40,000
20	Paid salary to staff	1,00,000
25	Paid rent	50,000

Perform the following tasks :

Post the transactions to the Journal. Prepare the Ledger and generate the Trial Balance. 30

× × × × × × ×