

MASTER OF COMPUTER APPLICATIONS (Revised)

(MCA)

00345

Term-End Practical Examination

June, 2017

**MCSL-036(P)/S3 : 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 section is for **one hour** duration including the viva-voce.*
 - (iii) *Attempt only that part(s) in which you are **not successful as yet**.*
 - (iv) *Answer **all** the questions in each section.*
 - (v) *Section A and Section B carry 25 marks each for the problem, and 5 marks for viva-voce. Section C carries 30 marks for the problem and 10 marks for viva-voce.*

SECTION A

(Object Oriented Analysis and Design)

1. The online travel management system provides many services : booking of hotel rooms, resorts, booking of air and railway tickets, payment through debit/credit cards as well as cash and cheque. It also issues online notification from time to time. It allows users to check the status of booking and also print reports depending on criteria.

Perform the following tasks :

- (a) Draw the use case diagram. 7
- (b) Define all the classes and draw the class diagram. 8
- (c) Draw the sequence and collaboration diagrams. 10

SECTION B
(Software Engineering)

- 2. Perform the following activities for the problem description given in Q1 (Section A) :**
- (a) Draw the DFDs at level 0 and level 1. 7
 - (b) Write pseudocodes for any two processes defined at level 1 of the DFD. 8
 - (c) Draw an E-R diagram, 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 company to prepare the Journal, Ledger and Trial Balance :

30

May 2017	Transaction	Amount (INR)
5 th	Started the business with cash	2,00,000
10 th	Deposited in the bank	1,00,000
12 th	Items purchased on credit	1,00,000
15 th	Purchased computers, furniture for the office in cash	75,000
20 th	Goods sold on cash	80,000
25 th	Goods sold on credit	30,000
30 th	Paid salary	85,000
31 st	Paid rent	40,000