

MASTER OF COMPUTER APPLICATIONS (Revised)
(MCA)

01736

Term-End Practical Examination

June, 2016

**MCSL-036(P)/S1 : 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) *The remaining marks are for viva-voce.*
 - (vi) *Viva-voce marks for Sections A, B and C are 5, 5 and 10 respectively.*

SECTION A

(Object Oriented Analysis and Design)

1. A bank has many customers. Most of its customers have a savings account with the bank. Customers can take loan from the bank which is to be paid back in instalments. A customer needs to keep a minimum balance in the bank and is allowed to perform transactions like deposit money in cash or cheque, withdraw money and transfer funds to another account besides loan facility. Debit card facility is also available.

Perform the following activities for the description given 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 Diagram. 10

SECTION B

(Software Engineering)

2. Perform the following activities for the description given in Q. No. 1 (Section A) :
- (a) Draw the DFDs at level 0 and level 1. 7
 - (b) Write the pseudocodes for two processes defined at DFD level 1. 8
 - (c) Draw an E-R diagram and convert the E-R diagram into relational tables showing the integrity constraints. 10

SECTION C

(Accountancy and Financial Management)

3. Post the following transactions after creating a new company, "Computer Age". Also prepare the Journal, Ledger and Trial Balance.

30

December 2015	Transactions	Amount (INR)
5 th	Started business with cash	50,000
9 th	Deposit cash in bank	10,000
13 th	Purchased computer and peripheral devices on credit	50,000
17 th	Purchased S/W on credit	30,000
20 th	Sold S/W to client	20,000
25 th	Purchased furniture in cash	5,000
27 th	Paid rent	7,000
29 th	Paid salary	10,000