

MASTER OF COMPUTER APPLICATION (MCA)

Term-End Practical Examination

June, 2013

01008

MCSL-036 : LABORATORY COURSE (FOR OBJECT ORIENTED ANALYSIS AND DESIGN, SOFTWARE ENGINEERING AND ACCOUNTANCY AND FINANCIAL MANAGEMENT)

Time allowed : 3 hours

Maximum Marks : 100

*Note : There are **three** sections in this paper. Each section is for **one hour**, duration including **viva-voce**. Attempt only those section(s) in which you are not successful as yet. Please note that remaining marks are for **viva-voce** of the sections.*

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 (EMIs). 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. The bank gives interest to the account holders.

Perform the following activities for the description given above :

- | | |
|---|----|
| (a) Draw a use case diagram. | 5 |
| (b) Define all the classes and draw a class diagram | 10 |
| (c) Draw the sequence and collaboration diagram. Make suitable assumptions, if any. | 10 |

SECTION-B

(SOFTWARE ENGINEERING)

1. Perform the following activities for the description given in "section-A" (Q1).
 - (a) Draw the DFDs at level 0 and level 1. 7
 - (b) Write pseudo codes for at least two processes defined in level.1 DFD 8
 - (c) Draw an E-R diagram, convert the E-R diagram to relational tables showing the integrity constraints. 10

SECTION - C

(ACCOUNTANCY AND FINANCIAL MANAGEMENT)

1. Post the following transactions after creating a new company "Computer Zone". Also prepare the journal ledger and trial balance. 30

June 2013	Transactions	Amount (INR)
1 st	Start Business with Cash	25,000
2 nd	Deposit in Bank	5,000
3 rd	Purchase Computer from "x " on Credit	10,000
4 th	Purchase Software on Cash	5,000
5 th	Purchase goods on Cash	5,000
10 th	Sold goods on Cash	10,000
11 th	Paid Cash to "x "	5,000
15 th	Sold goods on Cash	9,000
30 th	Paid Rent	5,000
30 th	Paid Salary	6,000