## MCA (Revised)

Term-End Practical Examination
June, 2011

## MCSL-036 : LABORATORY COURSE (FOR OOAD, 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, including viva-voce. Attempt only that part (s) in which you are not successful as yet.

## SECTION-A

## (OOAD)

1. $X$ and $Y$ are starting a bed and breakfast service in a small town. They will have four rooms for guests. They want a system to manage the reservation and to monitor expenses and profits. When a potential customer calls for reservation, they will check the calendar and if there is a vacancy, they will enter the customer name, address, phone number, dates, agreed upon price, credit card number and room number (s). Reservation must be guaranteed by 1 day's payment. Reservation will be held without guarantee for an agreed upon time. If not guaranteed by that date, the reservation will be dropped.
Perform the following tasks :
(a) Draw the use case, define all the classes and draw an object diagram.
(b) Draw the sequences and collaborative diagram.

## SECTION-B <br> (SOFTWARE ENGINEERING)

1. Perform the following tasks for the problem defined in the previous section :
(a) Draw DFDs of level 0 and level 1 . 7
(b) Write pseudocode for at least 2 processes defined at level 1.88
(c) Draw an E-R diagram its related tables showing its integrity $\mathbf{1 0}$ constraints.

## SECTION-C

(ACCOUNTANCY AND FINANCIAL MANAGEMENT)

1. Post the following transactions of a restaurant to prepare the journal ledger and trial balance.

| Jan -2011 | Transaction | Amount |
| :---: | :--- | :---: |
| $\mathbf{5}$ | Started the business with cash | $2,50,000$ |
| 10 | Deposited in the bank | 50,000 |
| 15 | Purchased tables and chairs | 80,000 |
| 20 | Purchased Freeze | 30,000 |
| 22 | Purchased goods for cash | 50,000 |
| 25 | Sold food items for cash | 60,000 |
| 27 | Sold food items for credits | 70,000 |
| 29 | Paid salary | 55,000 |
| 31 | Paid rent | 40,000 |

