## MCA (Revised)

# Term-End Practical Examination 00472 <br> December, 2011 <br> 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 the viva- voce. Attempt only those section (s) in which you are not successful as yet. (please note remaining marks are for viva -voce of the section)

SECTION-A
(OOAD)

1. A radio taxi system books taxi's for its customers. The company keeps record of all the old customers and give special privileges to frequent customers. The company has many taxis. All these taxis are owned by the TAXI drivers, who pays monthly charges for each month. The movement of customer through taxis is recorded in the central database system. The taxis are periodically maintained by a hired agency.
Perform the following tasks :
(a) Draw the use case, define all the classes and draw an object diagram.
(b) Draw the sequences and collaboration diagram. Make suitable assumptions, if 10 any.

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

1. Perform the following tasks for the problem defined in the previous section :
(a) Draw the DFDs at level 0 and level 1.7
(b) Write pseudocodes for at least 2 processes defined at level 1. ..... 8
(c) Draw ESR diagram, convert it to related tables showing integrity constraints. ..... 10

## SECTION-C <br> (ACCOUNTANCY AND FINANCIAL MANAGEMENT)

1. Post the following transactions for a medicine shop to prepare the journal ledger and trial balance.

| Sept -2011 | Transaction | Amount <br> (Rs) |
| :---: | :--- | ---: |
| 3 | Started the business with cash | $5,00,000$ |
| 5 | Deposited in the bank | $1,00,000$ |
| 7 | Purchased furniture in cash | 50,000 |
| 10 | Purchased equipment on credit | $1,00,000$ |
| 15 | Sold Medicine in cash | $2,00,000$ |
| 25 | Sold equipment on credit | 50,000 |
| 28 | Paid salary | 60,000 |
| 30 | Paid rent | 20,000 |

