

**MCA (Revised)**  
**Term-End Practical Examination** 00512  
**December, 2011**

**MCSL-036 : LABORATORY COURSE (FOR OOAD,  
SOFTWARE ENGINEERING AND ACCOUNTANCY AND  
FINANCIAL MANAGEMENT)**

*Time allowed : 3 hours*

*Maximum Marks : 100*

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

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**SECTION-A**  
**(OOAD)**

1. The publishing department of a university sells the books published by it. A book is written by many authors. A book has a price and is sold to its customers. The information on all customers is also recorded. The inventory of books are managed by the department. The authors are given 20% royalty which is paid annually.

Perform the following tasks.

- (a) Draw the use case, define all the classes and draw an object diagram. 15
- (b) Draw the sequences and collaborative diagram. Make suitable assumptions, if any. 10

**SECTION-B**  
**(SOFTWARE ENGINEERING)**

1. Perform the following tasks for the problem defined in the previous section :
  - (a) Draw DFDs at level 0 and level 1. 7
  - (b) Write pseudocodes for at least 2 processes defined at level 1. 8
  - (c) Draw E-R diagram, convert it to related tables showing its integrity constraints. 10

### SECTION-C

#### (ACCOUNTANCY AND FINANCIAL MANAGEMENT)

1. Post the following transactions of a book shop to prepare the journal ledger and trial balance. 30

Nov 11	Transactions	Amount in (Rs.)
3	Started the business with cash	2,00,000
5	Deposited in Bank	50,000
7	Purchased Computer	30,000
10	Purchased books on credit	60,000
15	Purchased stationary for cash	20,000
20	Sold Books on credit	20,000
22	Sold Books on cash	60,000
26	Paid Rent in cash	25,000