

**MASTER OF COMPUTER APPLICATIONS (Revised)**  
**(MCA)**

**Term-End Practical Examination**

**June, 2015**

03513

**MCSL-036(P)/S1 : LAB COURSE (FOR OOAD, SOFTWARE ENGINEERING,  
ACCOUNTANCY AND FINANCIAL MANAGEMENT)**

*Time : 3 Hours*

*Maximum Marks : 100*

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- 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.*
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**SECTION A**

**(OOAD)**

1. Admission procedure of some universities is as follows : An advertisement for July and January admission cycles is issued in the national newspapers two months in advance, giving essential qualifications for admission to different programs, the last date for receipt of application forms with the fee and "in"/hour for fee respectively and fee to be enclosed for different programs which are verified by the dealing clerk. The application forms are sent to the concerned schools. The schools of studies checks the application forms in detail and recommends the names of applicants to be admitted, rejected or to be kept in waiting list. Appropriate letters are sent to the Registrar's office which intimates the applicants. The process is manual. You are required to do the following tasks to make on-line admission system :

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

## SECTION B

### (Software Engineering)

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

## SECTION C

### (Accountancy and Financial Management)

3. Post the following transactions of a book shop to prepare the Journal, Ledger and Trial Balance.

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Feb. 2015	Transaction	Amount (INR)
5	Started the business with cash	2,00,000
10	Deposited in the bank	50,000
15	Purchased almirah, tables and chairs	50,000
20	Purchased books on credit from publishing houses	40,000
22	Subscribed for journals (on-line payment)	70,000
25	Sold books for cash	50,000
27	Sold subscription of journals to institution	80,000
28	Paid rent	20,000
28	Paid salary	30,000