

MASTER OF COMPUTER APPLICATIONS (Revised)
(MCA)

00996

Term-End Practical Examination

June, 2016

**MCSL-036(P)/S2 : LAB COURSE (FOR OOAD, SOFTWARE ENGINEERING,
ACCOUNTANCY AND FINANCIAL MANAGEMENT)**

Time : 3 Hours

Maximum Marks : 100

- 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.*
 - (vi) *Viva-voce marks for Sections A, B and C are 5, 5 and 10 respectively.*

SECTION A

(Object Oriented Analysis and Design)

1. A social networking site needs to be developed. Only college/university students are allowed to be registered. Each user of the system should be able to send an e-mail to anyone, if he has agreed to become his friend. He can post photographs, share information and also send gifts electronically. He can view friend's friend and who has visited his page. There should be provision for saving, formatting e-mail as well as printing them. The system should also prompt the user that there is an e-mail for him/her.

Perform the following tasks :

- (a) Draw the Use Case Diagram. 5
- (b) Define all the classes and draw a Class Diagram. 10
- (c) Draw the Sequence and Collaboration Diagram. 10

SECTION B

(Software Engineering)

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

SECTION C

(Accountancy and Financial Management)

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

30

February 2016	Transactions	Amount (INR)
5 th	Started the business with cash	5,00,000
7 th	Deposited in the bank	2,00,000
10 th	Purchased furniture items for cash	50,000
15 th	Purchased other items on credit	1,00,000
17 th	Purchased computers for cash	50,000
20 th	Goods sold for cash	60,000
27 th	Paid rent	30,000
28 th	Paid salary	30,000