MASTER OF COMPUTER APPLICATIONS (Revised)
(MCA)

00443   **Term-End Practical Examination**

June, 2017

MCSL-036(P)/S1 : 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)*   *Section A and Section B carry 25 marks each for the problem, and 5 marks for viva-voce. Section C carries 30 marks for the problem and 10 marks for viva-voce.*

SECTION A

(Object Oriented Analysis and Design)

1. Online admission system provides features to get registered by entering all the details of the applicants, applying for the different programs of the university, check the status of the admission, allowing users to generate reports, accepts online payment through credit/debit cards and making online query.

A prospective student can apply for admission simply by filling in online application form. While the admission is being filled the system generates the user name and password for verification and authentication for existing users.

You are required to do the following :

(a) Draw the use case diagram.   7

(b) Define all the classes and draw the class diagram.   8

(c) Draw the sequence and collaboration diagrams.   10

SECTION B

(Software Engineering)

2. Perform the following activities for Q1 given in Section A :

   (a) Draw the DFDs at level 0 and level 1.   7

   (b) Write pseudocodes for at least two processes defined at level 1 of the DFD.   8

   (c) Draw an E-R diagram of the above problem (Q1), convert the E-R diagram into relational tables showing the integrity constraints and relationship between entities.   10

SECTION C

(Accountancy and Financial Management)

3. Post the following transactions of a new company which is going to enter into furniture business : *30*

Jan 2017	Transaction	Amount (INR)
5th	Started the business with cash	1,50,000
7th	Deposited in the bank	50,000
10th	Purchased furniture from distributors on credit	1,00,000
15th	Purchased computer and other items for office with cash	70,000
20th	Sold furniture (cash)	30,000
22nd	Sold furniture (on credit)	30,000
27th	Paid salary to staff	25,000
30th	Paid rent + electricity bill	20,000

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