MASTER OF COMPUTER APPLICATIONS (Revised)
(MCA)
Term-End Practical Examination
December, 2016

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)　*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.　Online banking is an electronic payment system that enables customers of a bank to conduct a range of transactions through the financial institution's website. The customer enters the online banking facility using the customer number and other credentials previously set up.

The financial transactions include obtaining account balances, electronic bill payments, fund transfer and download facility for bank statements. You are required to do the following tasks :

(a)　Draw the use case diagram.　　　　　　　　　　　　　7

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

(c)　Draw the sequence and collaboration diagram.　　　　　10

SECTION B

(Software Engineering)

2. Perform the following activities for the problem description 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, convert the E-R diagram into relational tables showing the integrity constraints.   10

SECTION C

(Accountancy and Financial Management)

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

July 2016	Transaction	Amount (INR)
5th	Started the business with cash	1,00,000
10th	Deposited in the bank	50,000
12th	Purchased furniture for the company on credit	60,000
15th	Purchased software, computer and printer on credit	70,000
20th	Earned through advertisement in newspaper	50,000
25th	Earned through advertisement in TV	40,000
27th	Paid salary to staff	30,000
28th	Paid rent + electricity bill	25,000

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