MASTER OF COMPUTER APPLICATIONS (Revised)

(MCA)

Term-End Practical Examination

03789

December, 2015

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 Deisgn)

1. A tourist company provides many services : booking of hotel rooms, resorts, booking of railway and air tickets, cancellation of tickets, pick and drop cab facility from the airport. Payment can be accepted through credit card, cheque and cash. The company gives 20% discount in case the booking is done in a group (not less than 10). 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 activities for the problem description given in Q. No. 1 (Section A) :

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

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

   (c) Draw an E–R diagram, convert the E–R diagram into relational tables showing the integrity constraints.   10

SECTION C

(Accountancy and Financial Management)

3. Post the following transactions for a tourist company and prepare the journal, ledger and trial balance. *30*

April 2015	Transaction	Amount (INR)
5th	Started the business with cash	5,00,000
10th	Deposited in the bank	2,00,000
12th	Purchased computers, s/w and peripheral devices on credit	1,00,000
15th	Purchased furniture on credit basis	50,000
20th	Earned by booking tickets (in cash)	20,000
25th	Earned by booking hotel rooms and cab services (in cash)	30,000
27th	Paid rent	30,000
30th	Paid salary	40,000

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