MASTER OF COMPUTER APPLICATIONS (Revised)
(MCA)
Term-End Practical Examination
03394
December, 2014

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 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.

SECTION A
(OOAD)

1. A restaurant owner wants to computerize daily sales of food items and drinks and generate daily reports of total sales. It also maintains a record of items which have been ordered to purchase from distributors but not delivered in time. In such a case the reminder is sent to the distributor. There is also a provision to give discount of 10% to the customers, if the total purchase of items have exceeded ₹ 5,000. The system produces a monthly report showing total expenditure on purchase of items, paying rent of the restaurant and salary of the staff.

Perform the following activities for the problem description given above :

(a) Draw a use-case diagram.   5

(b) Define all the classes and draw a class diagram.   10

(c) Draw the sequence and collaboration diagram. Make suitable assumptions, if any.   10

SECTION B

(Software Engineering)

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

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

   (b) Write pseudocodes for at least two processes defined in DFD level 1. 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 after creating a PC maintenance company. Also prepare the journal, ledger and trial balance for the Company :

April 2014	Transactions	Amount (₹)
1st	A company started with cash	50,000
2nd	Opened a new account in the bank using cash	20,000
5th	Purchased office goods for cash	5,000
10th	Purchased office goods on credit	15,000
15th	Goods sold on cash	10,000
20th	Goods sold on credit	5,000
30th	Paid rent	8,000
30th	Paid salary	10,000

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