MASTER OF COMPUTER APPLICATIONS (Revised)

(MCA)

01365   Term-End Practical Examination

June, 2018

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. The goal of online admission system is to computerize the admission process and to provide support to the administration and candidates for a faster and easy way of maintaining records.

   On entering the specified URL for the website, the screen with "Instruction to Applicants" opens. Applicants can download "Application form format" by "Click here to Download" to know the required information.

   There are various tags such as Program offered by the institute, Admission information – displays the admission details, contact us – displays the contact details, Feedback – to use for providing feedback about the system. Student online admission starts with 'Apply Now'. On confirmation it generates applicant's number.

   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 the problem given in Q1 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 company to prepare the Journal, Ledger and Trial Balance : *30*

Feb 2018	Transaction	Amount (INR)
5th	Started the business with cash	2,50,000
10th	Deposited in the bank	1,50,000
15th	Items purchased on credit	75,000
20th	Purchased S/W, H/W and furniture on cash	1,00,000
25th	Goods sold on credit	60,000
26th	Paid salary	50,000
28th	Paid rent	40,000

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     3,000