No. of Printed Pages : 3

MCSL-036/S1

Master of Computer Application (Revised) (MCA)
Term-End Examination
December, 2018

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)   Answer all the questions in each Section.

(iv)   Section A and Section B carry 25 marks each for the problem(s) and 5 marks for viva-voce. Section C carries 30 marks for the problem(s) and 10 marks for viva-voce.

(v)   Attempt only that part(s) in which you are not yet successful.

Section–A

(Object Oriented Analysis and Design)

1. A book publishing company offers a wide range of on-line services to students and libraries through the company's website. One needs to register first with the company's website. After obtaining the ID and the password previously setup, one accesses the on-line facilities of the company. The following on-line services are available :

(i) Purchasing books, magazines etc.

(ii) To provide dispatch status.

(iii) Uptodate information about new arrivals of books, magazines etc.

(iv) Suggested weekly readings of novels.

(v) Online payment facility.

You are required to do the following :

(a) Draw the use case diagram.   5

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

(c) Draw the sequence and collaboration diagrams.   10

Section–B

(Software Engineering)

2. Perform the following activities for the problem given in Q. 1 in Section A :

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

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

(c) Draw an E-R diagram of the above problem (Q 1, Section A), 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 Book Publishing Company to prepare the Journal, Ledger and Trial Balance :   30

Sept., 2018	Transactions	Amount (INR)
5th	Started the on-line business with cash	5,00,000.00
10th	Deposited in the bank	2,00,000.00
15th	Purchased computers, S/W and furnitures on credit	2,50,000.00
18th	Sold books through on-line payment	1,00,000.00
20th	Paid salary	75,000.00
28th	Paid rent	25,000.00