

MASTER OF COMPUTER APPLICATIONS (Revised)
(MCA)

01199

Term-End Practical Examination

December, 2015

**MCSL-036(P)/S1 : LAB COURSE (FOR OOAD, SOFTWARE ENGINEERING,
ACCOUNTANCY AND FINANCIAL MANAGEMENT)**

Time : 3 Hours

Maximum Marks : 100

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- 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.
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SECTION A

(Object Oriented Analysis and Design)

1. A machine shop produces many parts. It employs many technicians to design and produce these parts. A record is maintained to keep the inventory of materials needed for designing each part. The production of each part is tracked by giving a job number, start time, end time and technician's identification. Perform the following tasks :
- (a) Draw the use case diagram and define all the classes and draw the class diagram. 15
 - (b) 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 at least 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 of a new company which is going to start manufacturing different parts of a machine and prepare the journal, ledger and trial balance.

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March 2015	Transaction	Amount (INR)
5th	Started the business with cash	70,000
10th	Deposited in the bank	30,000
15th	Purchased inventory for the shop on credit	50,000
20th	Purchased computers and s/w on credit	60,000
22nd	Purchased furniture through cash	20,000
25th	Sold parts	30,000
29th	Paid electricity bill	3,000
30th	Paid salary	20,000