

MASTER OF COMPUTER APPLICATIONS (Revised)
(MCA)

01412

Term-End Practical Examination

June, 2014

**MCSL-025(P)/S1 : LABORATORY COURSE (FOR DATA AND FILE STRUCTURES,
NETWORKING, DBMS LAB AND JAVA PROGRAMMING)**

Time : 3 Hours

Maximum Marks : 100

Note : *There are four sections in this paper. Each section is of 45 minutes duration. Attempt only those sections in which you are not yet successful. Answer all the questions in each section. Each section carries 20 marks and the viva-voce for each section is of 5 marks separately.*

SECTION A

Data and File Structures

1. Write a C program to implement stack data structure with all its functions.

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SECTION B
Networking

Perform the practical on LINUX/UNIX/Windows 2000. In case you do not have sufficient rights to perform a task, then write all the steps needed to perform that task.

2. Run the following commands and write the uses of each command :

4

- (a) ping
- (b) rcp
- (c) rsh
- (d) chkdsk

3. Perform the following tasks :

9

- (a) Find the sorted list of active users.
- (b) Configure TCP/IP filter.
- (c) Install network printer.

4. Show all the steps to install Rockwell Protocol Interface (RPI).

7

SECTION C

DBMS Lab

5. (a) Create the following table with proper data type for all the fields. The key field is underlined. Insert 10 meaningful records in the table. 8

BOOK (ISBN, Title, Author, Publisher, Pages, Price)

- (b) Answer the following queries using SQL on the above table : 12

- (i) List all the books whose pages are more than 250 and price is less than ₹ 200.
- (ii) Find the name of the author and the publisher of the book with ISBN = 12746923.
- (iii) List all the titles and their price, published by "ANY BOOK Pvt. Ltd."

SECTION D

Java Programming

6. Write a Java program to create two threads T1 and T2. Thread T1 is having priority *six* and thread T2 is having default priority assigned to it. Implement threads T1 and T2 in such a way that T1 prints table of 2 and T2 prints table of 5.

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MASTER OF COMPUTER APPLICATIONS (Revised)
(MCA)

Term-End Practical Examination

June, 2014

01285

**MCSL-025(P)/S2 : LABORATORY COURSE (FOR DATA AND FILE STRUCTURES,
NETWORKING, DBMS LAB AND JAVA PROGRAMMING)**

Time : 3 Hours

Maximum Marks : 100

Note : *There are **four** sections in this paper. Each section is of **45 minutes** duration. Attempt only those sections in which you are **not yet successful**. Answer all the questions in each section. Each section carries 20 marks and the viva-voce for each section is of 5 marks separately.*

SECTION A

Data and File Structures

1. Write a C program to implement Binary Search algorithm. Find whether the value 25 is available in the following list, using this program : 20
20, 21, 21, 24, 25, 26, 27, 28, 40, 48, 50, 59, 100.

SECTION B

Networking

Perform the practical on LINUX/UNIX/Windows 2000. In case you do not have sufficient rights to perform a task, then write all the steps needed to perform that task.

2. Run the following commands and write the uses of each command : 4
 - (a) telnet
 - (b) netdiag
 - (c) rcp
 - (d) grep

3. Perform the following tasks : 9
 - (a) Create a **Cron** job that sends the message "Keep on working" to all the active users after every 30 minutes.
 - (b) Configure a windows client as a VPN client.
 - (c) Find all the lines in a file that contain the words "UNIX" or "LINUX".

4. Show all the steps for configuring the Internet Connection Firewall (ICF). 7

SECTION C

DBMS Lab

5. (a) Create the following tables with proper data type for all the fields. The key field is underlined. Insert 10 meaningful records in each table. 8

TEACHER (T_id, D_id, Subject, Name, Date_of_birth, Years_of_Exp)

DEPARTMENT (D_id, Address, D_Name, Total_No_of_Students)

- (b) Answer the following questions using SQL on the above table : 12

- (i) List the Name and D_Name of the teachers of Subject "Computer" who are having more than 2 years of experience.
- (ii) List the Name and Subjects of the teachers who are associated with the department where more than 200 students are registered.
- (iii) List the Name and Date_of_birth of all the "Physics" teachers.

SECTION D
Java Programming

6. Write a Java program to create an applet which takes area of a circle as input and draws the circle in blue color.

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MASTER OF COMPUTER APPLICATIONS (Revised)

(MCA)

01060

Term-End Practical Examination

June, 2014

**MCSL-025(P)/S3 : LABORATORY COURSE (FOR DATA AND FILE STRUCTURES,
NETWORKING, DBMS LAB AND JAVA PROGRAMMING)**

Time : 3 Hours

Maximum Marks : 100

Note : *There are **four** sections in this paper. Each section is of **45 minutes** duration. Attempt only those sections in which you are **not yet successful**. Answer all the questions in each section. Each section carries 20 marks and the viva-voce for each section is of 5 marks separately.*

SECTION A

Data and File Structures

1. Write a C program to create Singly Linked List with all its methods. Also write a method to count the number of nodes in this Linked List. 20

SECTION B

Networking

Perform the practical on LINUX/UNIX/Windows 2000. In case you do not have sufficient rights to perform a task, then write all the steps needed to perform that task.

- 2.** Run the following commands and write the uses of each command : 4
 - (a) ftp
 - (b) hostname
 - (c) ipconfig
 - (d) drivers

- 3.** Perform the following tasks : 10
 - (a) Find your Ethernet Physical Address.
 - (b) Add a new user in a group and define permissions.
 - (c) Send a mail to a group and to yourself.
 - (d) Set the execution time for a job to run it automatically after 5 minutes.

- 4.** Perform encryption of a file on Windows 2000 server. 6

SECTION C

DBMS Lab

5. (a) Create the following table with proper data type for all the fields. The key field is underlined. Insert 10 meaningful records in the table. 8

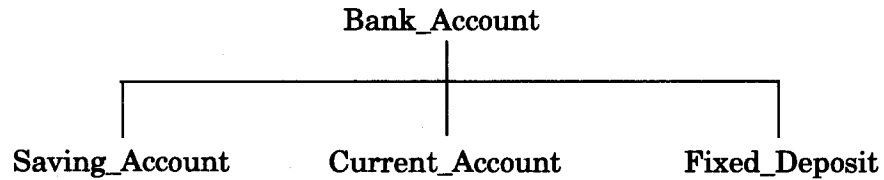
STUDENT (S_id, Name, Dep_Name, Age, Address, Programme, Marks)

- (b) Answer the following questions using SQL on the above table : 12
- (i) List name and address of all the students who are more than 25 years old and registered in MCA programme.
 - (ii) Find Department name and Programme in which student with S_id = 1200012340.
 - (iii) List the name and address of all the students who are registered in BCA programme and having more than 75% marks.

SECTION D
Java Programming

6. Write a Java program to implement the following class hierarchy :

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Your implementation should include the following :

- (i) Proper constructors for all the classes.
- (ii) A polymorphic function `Find_Balance ()` to find the available balance in account.
- (iii) Proper mechanism for exceptions handling.