

**MASTER OF COMPUTER APPLICATIONS (Revised)**  
**(MCA)**

02873

**Term-End Practical Examination**

**December, 2016**

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

*Time : 3 Hours*

*Maximum Marks : 100*

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**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.*

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**SECTION A**

**Data and File Structures**

1. Write a program in 'C' language to implement a Deque. 20

**SECTION B**

**Networking**

2. Write a shell script in Linux / Unix that accepts a text file as input and prints all lines which have at least one number to the standard output. 20

## SECTION C

### DBMS Lab

3. (a) Create the following table with appropriate data types for all the fields. The key field is underlined. Insert 10 meaningful records into the table. Make necessary assumptions. 10
- UNIVERSITY (Name, State, Country, Total\_No\_of\_Students)
- (b) Create the following query using SQL on the above table : 10
- List the names of all Universities which are having more than 20000 students.

## SECTION D

### Java Programming

4. Write a program using Java to create an Applet that takes the area of a Rectangle as input and draws the Rectangle in Blue colour. 20
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