# POST GRADUATE DIPLOMA IN LIBRARY AUTOMATION AND NETWORKING (PGDLAN) 

Term-End Practical Examination<br>December, 2018<br>\section*{MLIL-007 : PROGRAMMING}

Time Allowed : 2 hours

Maximum Marks : 50
(Practical Work : 40
Viva Voce : 10)
(Weightage : 40\%)

General Instructions :
(i) This Question Paper comprises three parts. Attempt any one part. Answer all the questions from attempted part.
(ii) Show the output to your examiner.
(iii) Save your output in your system which will be checked by the examiner.
(iv) Printout of the answers wherever required should be taken in a sheet duly signed by RD with his/her stamp. Write your Roll No., Study Centre and date of examination on these sheets.
(v) Candidates are not permitted to use any manual/ handbook in carrying out the practical.

## PART - A

(C++)

1. Write a program in $\mathrm{C}++$ to implement a class Grade Card for a programme "PGDLAN". This class contains student_name, enrollment number, programme_code, course_name, course_code mark_obtained, maximum marks, etc., student is pass in a course, if she/he obtain $50 \%$ mark of maximum marks in a course make necessary calculations and print the Grade Card of the students.

Note : Make suitable assumptions, if any.
2. Design and implement the following class hierarchy in C++.


Your implementation should include :

- member variables
- constructor and destructor
- A member function that display the number of books in a specific category.


## PART - B

## (Java)

1. Write a program in Java to convert the upper case characters in a text string to the lower case characters and vice-versa. The input string will be given by the user.

Note: For example user input in JAVA output should be java and vice-versa.
2. Write a program in Java to implement a class Matrix, which can add and subtract any two matrices of size $3 \times 3$. Write an appropriate data members and methods. The input matrices will be given by the user.

## PART - C

## (Visual Basic)

1. Create a VB application which is having two menu option i.e., count and words. When user select count menu option, it will ask for a string as an input and display the number of alphabets in that string. If the choice is words, it asks for a sentence as an input and display the number of words in that sentence.
2. Create the following VB form and convert the currency.


User will enter input in Indian Rupees textbox. On click of any given Button equivalent amount will be displayed.
Assume : 1 USD = ₹ 70 (Indian Rupees)
1 AUD $=₹ 50$ (Indian Rupees)
$1 \mathrm{CAD}=₹ 55$ (Indian Rupees)

