# MCA 4th Semester Examination, 2016 <br> COMPILER CONSTRUCTION LAB 

(Practical)
PAPER-MCA-408
Full Marks: 50
Time : $\mathbf{3}$ hours
Answer any two on lottery basis
The questions are of equal value

1. Write a program in LEX/YACC to count the number of characters, words and lines in a given string.
2. Write a program in LEX/YACC which replaces all the occurrences of 'VU' with 'Vidyasagar University' of a given string.
3. Write a program in LEX/YACC to insert line numbers to each line of a given file.
4. Write a program in LEX/YACC to count the number of vowels and consonants in a given string.
5. Write a program in LEX/YACC to count the number of positive and negative integers from a given set of numbers.
6. Write a program in LEX/YACC to recognize an English statement as simple or compound.
7. Write a program in LEX/YACC to count the numbers of keywords in a given C program.
8. Write a program in LEX/YACC to recognize strings like $a^{\prime} \mathbf{a}^{n}{ }^{n}$.
9. Write a program in LEX/YACC to check valid arithmetic statements from a given statement.

## ( 3 )

10. Write a program in LEX/YACC to check a valid variable from a given set of strings.
11. Write a program in LEX/YACC to construct a desk calculator.
12. Write a program in LEX/YACC to delete comment and blank lines from a given file.
13. Write a program in LEX/YACC to recognize strings that starts with 'ab' or ends with 'ab'.
14. Write a program in LEX/YACC which takes an English statement as input and gives the output as the parts of speech.

PNB : 5 marks<br>Viva voce : 10 Marks

