

2017**MCA****4th SEMESTER EXAMINATION****COMPILER LAB****PAPER—MCA-408****(Practical)***Full Marks : 50**Time : 3 Hours**The figures in the margin indicate full marks.**Candidates are required to give their answers in their own words as far as practicable.**Illustrate the answers wherever necessary.**Answer any two on lottery basis.***20×2**

1. Write a program in LEX/YACC to recognize a valid arithmetic expression and to recognize the identifier and operators present. Print them separately.
2. Write a program in LEX / YACC to count number of characters words, blank and lines in a given string.
3. Write a program to recognize valid reserved keywords, valid identifier and numbers in LEX.

(Turn Over)

4. Write a program to find whether a given number is Binary, Octal or Hexadecimal.
5. Write a LEX program to count the number of comment lines in a given C program. Also eliminate them and copy the resulting program into separate title.
6. Write a program using LEX to recognize and count the number of identifier and keywords present in a given input file.
7. Write a program in LEX / YACC to insert line numbers to each line of a given file.
8. Write a program in LEX / YACC which takes an english statement as input and gives the output as the parts of speech.
9. Write a program in LEX / YACC to construct a desk calculator.
10. Write a program to count. "HE" within a file containing "HE" and "SHE". Replace all "HE" by "IT".

PNB : 5 marks

Viva Voce : 5 marks
