MCA 4th Semester Examination, 2013

COMPILER CONSTRUCTION LAB

PAPER – 408

Answer any **one** on lottery basis

1. Write a Program in LEX/YACC to check whether a given string is a valid ID (Identifier), Keyword, RELOP (Relational Operator) or others.

2. Write a program in LEX/YACC to check whether a given expression (relational or assignment or bitwise operator) is valid or not and it gives the type of expression as output.

3. Write a program in LEX/YACC to eliminate white space and collect numbers as a token.

4. Construct a syntax directed translation scheme that translates integers into roman numerals. Implement translator from integers to roman numerals based on above syntax directed translation using LEX/YACC.

5. Write a program using FLEX/YACC, which recognize regular expression.

6. Count no. of printf in a program using lex.

7. Write a C code analyzer in LEX/YACC: comments, code, white space, count braces, keywords etc. Try to identify function definition and declaration, which are names followed by '('outside of any braces').

8. Write Programs in LEX/YACC, which create a simple desk calculator program that performs addition, subtraction, and multiplication and division operation. This calculator program also allows you to assign values to variables (each designated by a single lower case letter) and then use the variables in calculation.

9. Write a program in LEX/YACC to check whether a sentence of English language is grammatically correct or not.

10. Write a program in LEX/YACC which takes a English sentence as input and gives the output as the parts of speech.

11. Write a program in LEX/YACC which takes a C program as inputs and delete the comment, white space and Count the no of lines.

12. Write a program in LEX/YACC which counts the no. of lines, total no. of characters, total no. of vowels and total no. of punctuation marks in a paragraph.

13. WAP to count no. of vowel and consonant in a sentence.

Marks Distribution

Write :

(*a*) Brief Description of the Problem – 20

(*b*) Program listing – 40

(*c*) Result and Discussion – 20

(*d*) Viva – 20