Viva-voce: 20

PNB : 10

2019

MCA

4th Semester Examination

Compiler Construction Lab

PAPER – MCA-408

Full Marks : 50

Time : 2 Hours

The figures in the right-hand 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*** question on Lottery Basis 2 X 15=30

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 which takes standard input as output of system date and time and give either of the following messages "Good Morning", "Good Afernoon", " Good Evening".

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. 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.

7. Write programs in LEX/YACC, which replaces all the occurrences of "rama" with "RAMA" and "sita" with "SITA".

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

(Continued)

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

10. 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.

11. 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.

12. Write a program in LEX/YACC to check the Parts of Speech of a Sentence.

13. Write a program in LEX/YACC to count all occurrences of "rama" and "sita" in a given file and eliminate them.

14. Write programs in LEX/YACC that eliminate multiple spaces and tabs and replace with a single space and remove empty lines.

15. Write a lex program to count the number of comment lines in a given C program. Also eliminate them and copy that program into separate file.

16. Program to recognize whether a given sentence is simple or compound.

17. Program to recognize a valid arithmetic expression and to recognize the identifiers and operators present. Print them separately.

PNB – 10
Viva – 10