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M.Sc. 2nd Semester Examination

Computer Science

Paper : COS–295(M2)

(Compiler Construction Lab)

(Practical)

Full Marks : 25

Time : 2 hours

Answer *any two* programs (on lottery basis) :

2×10=20

1. Write a program using LEX to recognize a valid arithmetic expression and to recognize the identifiers and operators present. Print them separately.

2. Write a program using LEX to recognize whether a given sentence is simple or compound.

3. Write a program using LEX to recognize and count the number of identifiers in a given input file.

(2)

4. Write a LEX program to count the numbers of comment lines in a given C program. Also eliminate them and copy the resulting program into separate file.

5. Write a program using LEX to count the number of characters, words, spaces and lines in a given input file.

6. Write a program to find whether given number is octal or hexadecimal.

7. Write a program to compute the first of a given grammar.

8. Write a LEX program to recognize keywords and identifiers.

9. Write a LEX program to count number of vowels and consonant.

10. Write a LEX program to count the type of numbers.

11. Write a LEX program to count the number of prinft and scanf statements.

12. Write a LEX program to find simple and compound statements.

13. Write a LEX program to count the number of identifiers.

(Continued)

(3)

14. Write a LEX program to count the number of words, characters, blank spaces and lines.

15. Write a LEX program to count the number of comment lines.

16. Write a LEX program to check the validity of arithmetic statements.

17. Write a LEX program to find the number of constants.

Distribution of marks :

Each experiment (Coding–7, Output–3)	10
PNB	2
Viva	3

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