

2025

M.Sc. 1st Semester Examination
COMPUTER SCIENCE

Paper : COSC402X8
(Compiler Design Lab)
(Practical)

Full Marks : 15

Time : One Hours

The figures in the margin indicate full marks.

Answer any *one* question : $10 \times 1 = 10$

(Choose the question on the lottery basis)

1. Write a LEX/YACC program to count the number of characters, words, and lines in a given input.
2. Write a LEX/YACC program to insert line numbers at the beginning of each line in a given file.

3. Write a LEX/YACC program to count the number of vowels and consonants in a given sentence.

4. Write a LEX/YACC program to count the number of positive and negative integers from a given set of numbers.

5. Write a LEX/YACC program to replace all occurrences of "MSC" with "Master of SCIENCE" in a given string.

6. Write a LEX/YACC program to count the number of printf and scanf statements and replace them with read and write functions, respectively.

7. Write a LEX/YACC program to count the number of comment lines in a C program and copy the program to another file after removing all comment lines.

(3)

8. Write a LEX/YACC program to check whether a given arithmetic expression is valid or not.

9. Write a LEX/YACC program to remove comment lines and blank lines from a file and then count the total number of remaining lines.

10. Write a LEX/YACC program to recognize strings that start with "ab" or end with "ab".

Practical Notebook : 02 and Viva-voce : 03
