**DEPARTMENT OF COMPUTER ENGINEERING**

**HSE 413 COMPILER DESIGN**

**ASSIGNMENT 1**

1. Construct SLR parsing table for

E -> E + T

E -> T

T -> T\*F

T -> F

F -> (E)

F -> id [15]

1. Consider the expression below:

x = -a \* b + -a \* b

Write the three-address code for the above expression. [7]

1. Show the output generated by each phase for the following expression:

x=(a+b)\*(c+d) [8]

1. Design a predictive parser for the following grammar:

S → aABe

A → Abc | b

B → d [10]

5. Eliminate ambiguities from the following grammar:

S -> iEtSeS | iEtS | a

E -> b|c | d [10]

**Due Date : 04 April 2025**