

1997 Paper 13 Question 7

Compiler Construction

Investigate whether the following grammar for regular expressions is SLR(1) by attempting to construct its Action and Goto matrices.

$$S \rightarrow R \text{ eof}$$
$$R \rightarrow F \mid R + F$$
$$F \rightarrow P \mid F P$$
$$P \rightarrow x \mid (R) \mid P *$$

Find all the conflicts, if any, in the two matrices.

[20 marks]