

3. SLR(k) says look k symbols ahead when LR(0) table has conflict. This means SLR(0) says to look 0 symbols ahead if conflict.

That means conflict cannot be in LR(0) table since no look ahead is used. So $SLR(0) = LR(0)$

else
 $\langle E_2.code, converted, T.code, converted, result \rangle$

4. a)

Prefix: + / + a b c d + e f
 Postfix: a b c d + / e f + +

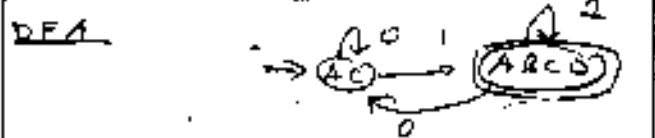
b) Prefix: + + / / a b c d e
 Postfix: e b / c / d + e +

7. (a) Pumping lemma is used to show that a language is not context free. It cannot be shown that a language is context free.

(b) The grammar may be ambiguous, but the language may still be deterministic, and hence LR(\neq).

(e.g., $S \rightarrow SS | () | (S)$ made deterministic by $S \rightarrow S() | S(S) | () | (S)$)

5) $(0^*1)^*(0^*1)$



This already is minimized.

(c) Reg expr R generates language L iff and only if it generates all strings in L and nothing else. a^*b^* generates $a^n b^m$ but also other strings, e.g. $aaab$, $abbb$ etc. so $a^n b^m$ and a^*b^* are not the same.

6 (a) Synthesized (upward)

(b) Need to have Right hand side attributes to pass to left hand side nonterminal which requires a bottom up parse.

(c) yes. Procedure is also bottom up.

$(\emptyset) E_1 \rightarrow E_2 + T$

$E_1.code =$
 if $E_2.type = T.type$ then
 $\langle E_2.code, T.code,$
 if $T.type = result$ then
 $else \{ + \}$

22-141 50 SHEETS
 22-142 100 SHEETS
 22-144 200 SHEETS

