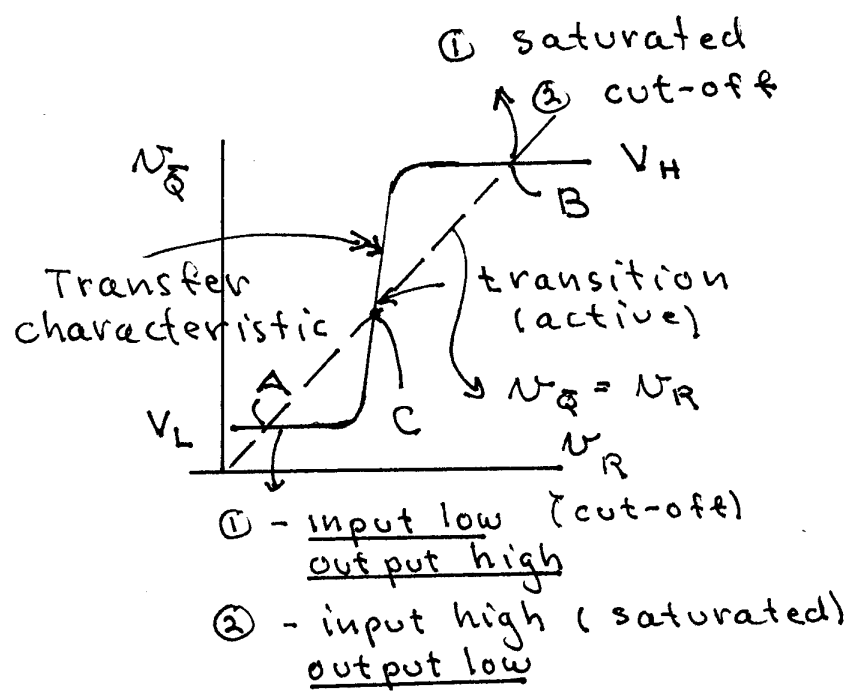
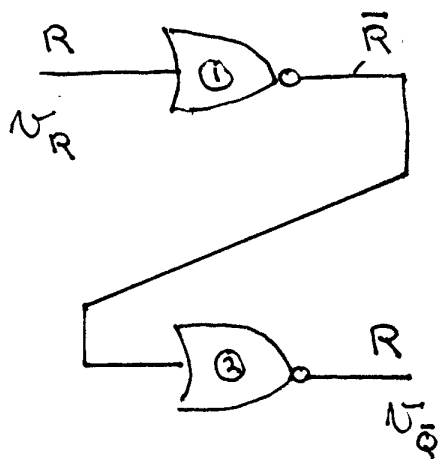
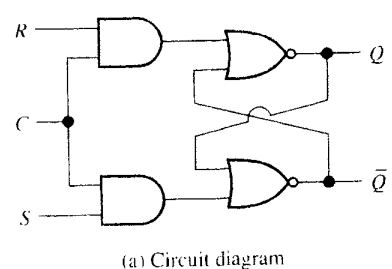


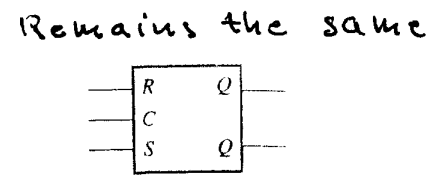
The SR Flip-Flop is an extension of the latch



connect  $V_{\bar{Q}}$  to  $V_R$  : Need simultaneous solution of transfer curve and  $V_{\bar{Q}} = V_R$ .  
Two stable points result A and B . C is unstable



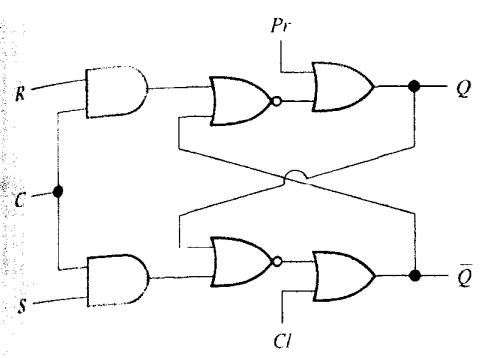
R	S	C	$Q_n$
0	0	x	$Q_{n-1}$
0	1	1	1
1	0	1	0
1	1	1	Not allowed
x	x	0	$Q_{n-1}$



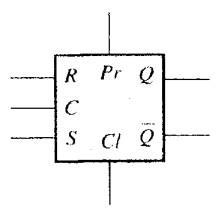
(a) Circuit diagram  
 Figure 7.44 A clocked SR flip-flop.

(b) Truth table

(c) Circuit symbol



$P_r$	$C_l$	R	S	C	$Q_n$
0	0	0	0	x	$Q_{n-1}$
0	0	0	1	1	1
0	0	1	0	1	0
x	x	1	1	1	Not allowed
0	1	x	x	x	0
1	0	x	x	x	1
1	1	x	x	x	Not allowed



(a) Circuit diagram

(b) Truth table

(c) Circuit symbol

Figure 7.45 A clocked SR flip-flop with asynchronous preset and clear inputs.