



UNIT - III

3. A) Design a divide by 12 counter using S-R flip flop. 10
- B) A state table of sequential circuit with one input x is shown below. Reduce the same upto 5 states and design the circuit using J-K flip flop. 10

PS	NS O/P	
	$x = 0$	$x = 1$
A	B ₁ O	C ₁ O
B	D ₁ O	E ₁ O
C	G ₁ O	E ₁ O
D	H ₁ O	F ₁ O
E	G ₁ O	A ₁ O
F	G ₁ L	A ₁ O
G	D ₁ O	C ₁ O
H	H ₁ O	A ₁ O