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Program BSC in CSE

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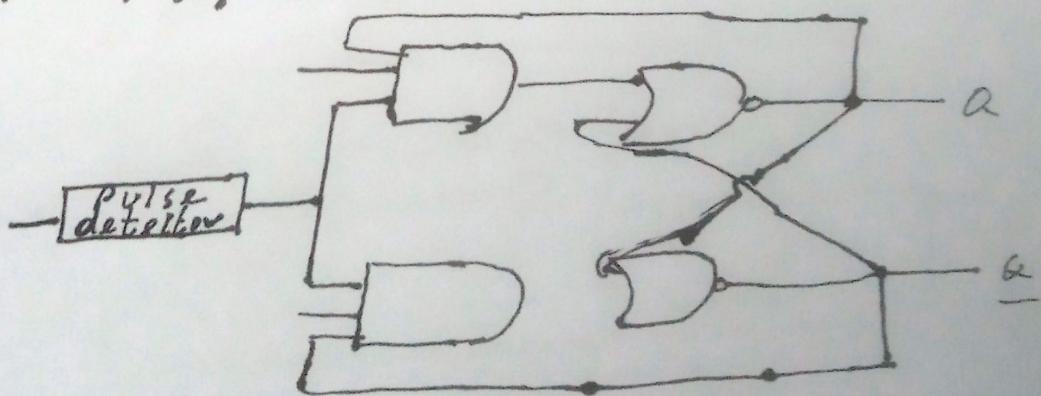
course title Digital Electronics
and pulse technique.

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Ans 1) a) A flip flop is a type of circuit that can store and recall a single bit of information. Its name comes from its ability to flip or flop between two stable states. By latching a value and changing it when triggered by a clock signal, flip flop can store data over time.

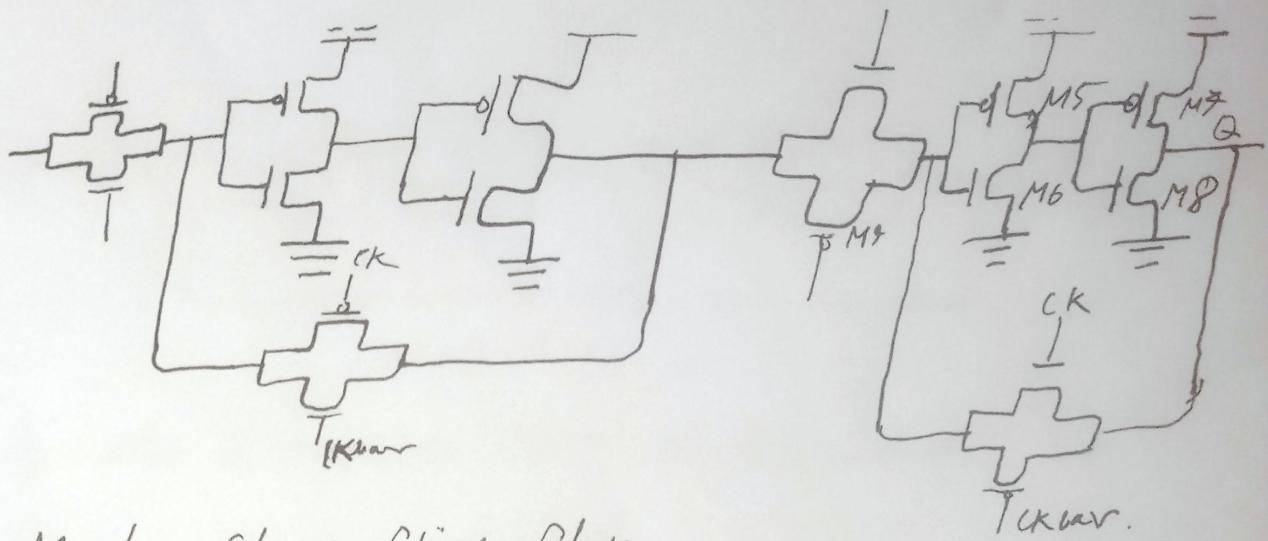
Ans 1) b) There are two types of sequential circuit, synchronous and asynchronous. Synchronous circuits are digital circuits that are synchronized by clock signals. Asynchronous circuits are digital circuit that do not rely on clock signals

Ans 2) a)



controlled latches using JK flip flop.

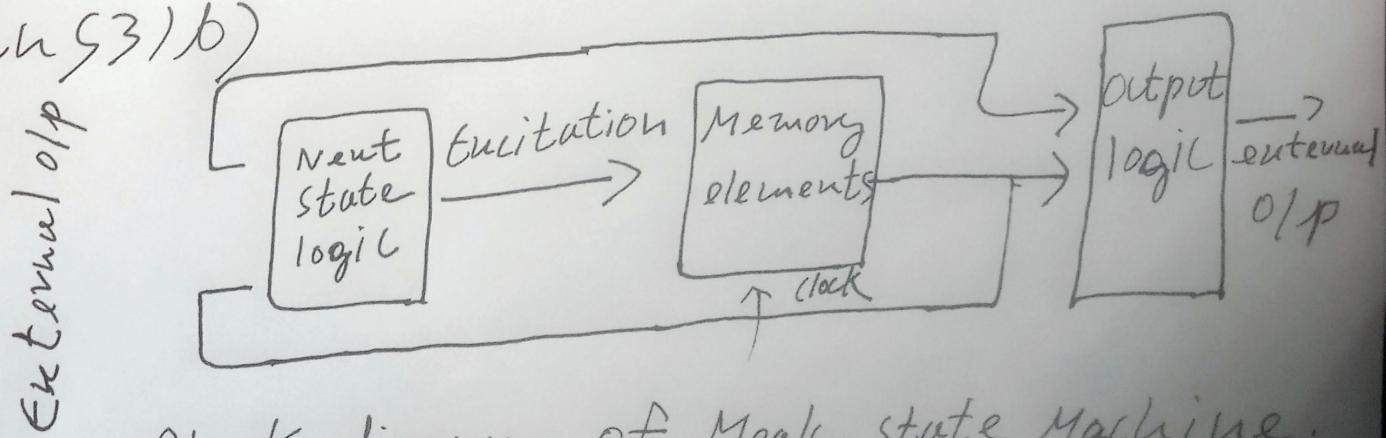
Ans 2) b)



Master slave flip flops
(Negative edge trigger)

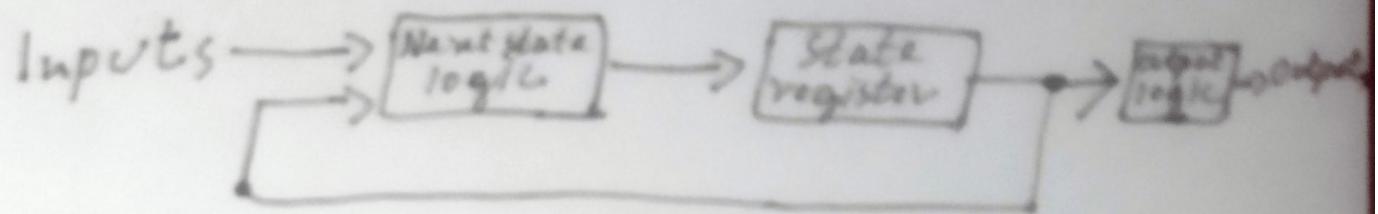
Ans 3) a) A mealy Machine changes its output on the basis of its present state and current input. A Moore Machine's output depends only on the current state. It does not depend on the current input.

Ans 3) b)



Block diagram of Mealy state Machine.

Aus 3) c)



State diagram Moore machine.