MCQs of DLD

1. Which of the following gates give output 1, if and only if at least one input is 1?
   A. OR
   B. AND
   C. NOR
   D. NAND

   □ Answer - Click Here:
   A

2. For performing the function of two-input OR gate, What is the minimum number of two-input NAND gates used?
   A. 2
   B. 3
   C. 4
   D. 5

   □ Answer - Click Here:
   B

3. In an application where input signals may ________________, Asynchronous circuits are useful.
   A. never change
   B. change at any time
   C. both a and b
   D. None

   □ Answer - Click Here:
   C

4. The time required by a gate or inverter to change their state is called ________________.
   A. Rise time
   B. Decay time
   C. Charging time
   D. Propagation time

   □ Answer - Click Here:
   D
5. The next state is determined in a sequential circuit is determined by ________ and ________

A. Current state and external input
B. Current state, flip-flop output
C. State variable, current state
D. Input and clock signal applied

□ Answer - Click Here:

A

6. SR latch contain ____________

A. 4 input
B. 3 inputs
C. 2 inputs
D. 1 inputs

□ Answer - Click Here:

C

7. If a pulse change from 10% to 90% of its maximum value, the time required is known as ____________.

A. Rise time
B. Operating speed
C. Propagation time
D. Decay time

□ Answer - Click Here:

A

8. By using two cascading counters ____________, ____________ the divide-by-60 counter in digital clock is implemented.

A. Mod-10, Mod-50.
B. Mod-50, Mod-10
C. Mod-6, Mod-10
D. Mod-50, Mod-6

□ Answer - Click Here:

C

9. Which table is not a part of the asynchronous analysis procedure?

A. transition table
B. excitation table
C. flow table
D. state table

□ Answer - Click Here:
10. Digital data can be applied to gate by maximum frequency which is called _______.

A. Charging time  
B. Propagation speed  
C. Binary level transaction period  
D. Operating speed

☐ Answer - Click Here:

D

11. Minimum time for which input signal maintained at the input of flip-flop is called __________ of the flip-flop.

A. Set-up time  
B. Hold time  
C. Pulse Stability time (PST)  
D. Pulse Interval time

☐ Answer - Click Here:

B

12. For making a transition table we use __________.

A. 3 steps  
B. 5 steps  
C. 6 steps  
D. 8 steps

☐ Answer - Click Here:

C