

## CS-302 Quiz Preparation Virtual University

Sr	Questions	Answers Choice
1	We have a digital circuit. Different parts of circuit operate at different clock frequencies (4MHZ, 2MHZ and 1MHZ), but we have a single clock source having a fix clock frequency (4MHZ), we can get help by _____	<p>A. Using S-R Flop-Flop            B. D-flipflop            C. J-K flip-flop            D. T-Flip-Flop</p>
2	A positive edge-triggered flip-flop changes its state when _____	<p>A. Low-to-high transition of clock            B. High-to-low transition of clock            C. Enable input (EN) is set            D. Preset input (PRE) is set</p>
3	Generally, the Power dissipation of _____ devices remains constant throughout their operation.	<p>A. TTL            B. CMOS 3.5 series            C. CMOS 5 Series            D. Power dissipation of all circuits increases with time</p>
4	The capability that allows the PLDs to be programmed after they have been installed on a circuit board is called _____	<p>A. Radiation-Erase programming method (REPM)            B. In-System Programming (ISP)            C. In-chip Programming (ICP)            D. Electronically-Erase programming method (EEPROM)</p>
5	The output of an AND gate is one when _____	<p>A. All of the inputs are one            B. Any of the input is one            C. Any of the input is zero            D. All the inputs are zero</p>
6	The sequence of states that are implemented by a n-bit Johnson counter is	<p>A. <math>n+2</math> (n plus 2)            B. <math>2n</math> (n multiplied by 2)            C. <math>2n</math> (2 raise to power n)            D. <math>n^2</math> (n raise to power 2)</p>
7	_____ occurs when the same clock signal arrives at different times at different clock inputs due to propagation delay.	<p>A. Race condition            B. Clock Skew            C. Ripple Effect            D. None of given options</p>
8	Excess-8 code assigns _____ to "+7"	<p>A. 0000            B. 1001            C. 1000            D. 1111</p>
9	In _____ Q output of the last flip-flop of the shift register is connected to the data input of the first flip-flop of the shift register.	<p>A. Moore machine            B. Meally machine            C. Johnson counter            D. Ring counter</p>
10	The simplest and most commonly used Decoders are the _____ Decoders	<p>A. <math>(n-1)</math> to <math>(2n-1)</math>            B. <math>(n-1)</math> to <math>2n</math>            C. <math>n</math> to <math>2n-1</math>            D. <math>n</math> to <math>2n</math></p>
11	A synchronous decade counter will have _____ flip-flops	<p>A. 3            B. 4            C. 7            D. 10</p>
12	Smallest unit of binary data is a _____	<p>A. Bit            B. Nibble            C. Byte            D. Word</p>
13	The best state assignment tends to _____.	<p>A. Maximizes the number of state variables that don't change in a group of related states            B. Minimizes the number of state variables that don't change in a group of related states            C. Minimize the equivalent states            D. None of given options</p>
14	NAND gate is formed by connectina	<p>A. AND Gate and then NOT Gate            B. NOT Gate and then AND Gate            C. OR Gate and then AND Gate            D. AND Gate and then OR Gate</p>

		C. AND Gate and then OR Gate D. OR Gate and then AND Gate
15	A GAL is essentially a _____.	A. Non-reprogrammable PAL B. PAL that is programmed only by the manufacturer C. Very large PAL D. Reprogrammable PAL
16	_____ counters as the name indicates are not triggered simultaneously.	A. Asynchronous B. Synchronous C. Positive-Edge triggered D. Negative-Edge triggered
17	The address from which the data is read, is provided by _____	A. Depends on circuitry B. None of given options C. RAM D. Microprocessor
18	Above is the circuit diagram of _____.	A. Asynchronous up-counter B. Asynchronous down-counter C. Synchronous up-counter D. Synchronous down-counter
19	A full-adder has a $C_{in} = 0$ . What are the sum (<PRIVATE "TYPE=PICT;ALT=sigma">) and the carry ( $C_{out}$ ) when $A = 1$ and $B = 1$ ?	A. $= 0, C_{out} = 0$ B. $= 0, C_{out} = 1$ C. $= 1, C_{out} = 0$ D. $= 1, C_{out} = 1$
20	NOR gate is formed by connecting _____	A. OR Gate and then NOT Gate B. NOT Gate and then OR Gate C. AND Gate and then OR Gate D. OR Gate and then AND Gate