

One of the major drawbacks to the use of asynchronous counters is that high-frequency applications are limited because of internal propagation delays

What is a shift register that will accept a parallel input and can shift data left or right called?
bidirectional universal

A 4-variable AND-OR circuit produces a 1 at its Y output. Which combination of inputs is correct?

A = 0, B = 1, C = 1, D = 0

A ripple counters speed is limited by the propagation delay of each flip-flop

The output of a standard TTL NAND gate is used to pull an LED indicator LOW. The LED is in series with a 470- resistor. What is the current in the circuit when the LED is on?

7.02 Ma

Why should a LED be pulled LOW from a logic gate rather than pulled HIGH?
LOW-level current is larger.

Why is the Schmitt trigger needed in the 60-Hz TTL-level clock pulse generator?
to provide a sharp pulse waveform

To operate correctly, starting a ring counter requires
presetting one flip-flop and clearing all the others

What happens to the parallel output word in an asynchronous binary down counter whenever a clock pulse occurs?
The output word decreases by 1.

What type of register would shift a complete binary number in one bit at a time and shift all the stored bits out one bit at a time?

SISO