

EXAMPLE 4.21 If the waveforms A, B, and C shown in Figure 4.41a are X-NORed, determine the output waveform.

Solution

The X-NOR output of a number of variables is HIGH, only when an even number of input variables (including 0) are LOW. The output waveform is shown in Figure 4.41b.

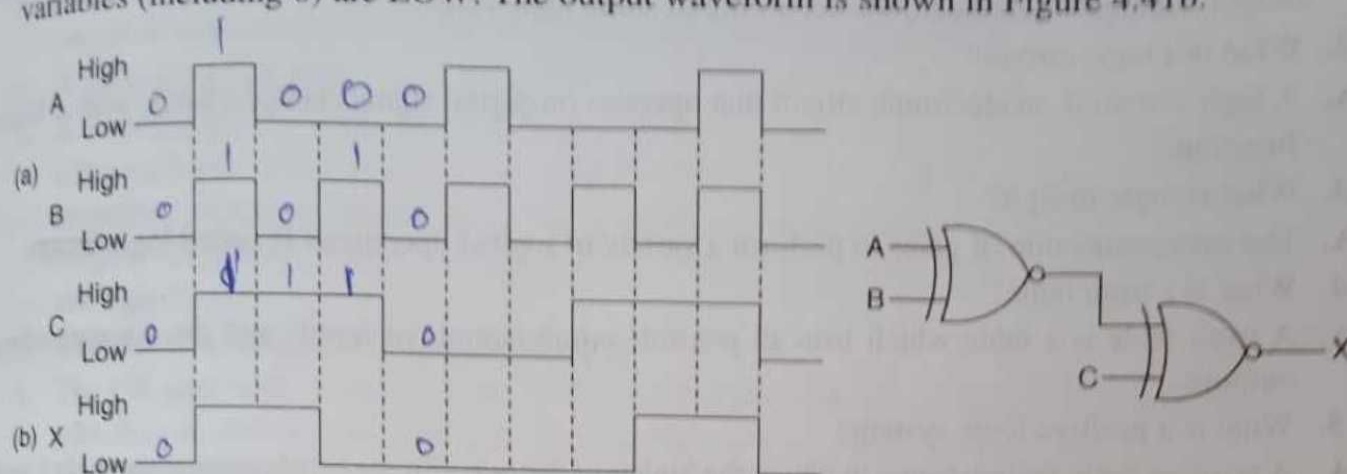


Figure 4.41 Example 4.21.

EXAMPLE 4.22 Determine the output waveform for the circuit shown in Figure 4.42.

EXAMPLE 4.18 If the waveforms A and B shown in Figure 4.38a are applied to a two-input X-OR gate, determine the output waveform.

Solution

The output of an X-OR gate is HIGH, only when the inputs are not equal. The output waveform is shown in Figure 4.38b.

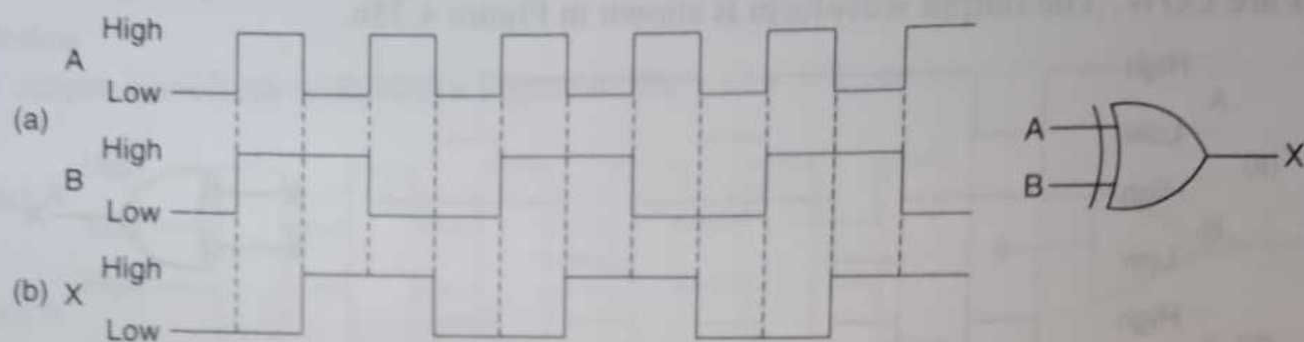


Figure 4.38 Example 4.18.

3. The waveform A & B are applied to an active LOW AND gate. What is the output waveform?

