

GATE IN2023

1. In the circuit shown, the initial binary content of shift register A is 1101 and that of shift register B is 1010. The shift registers are positive edge triggered, and the gates have no delay.

When the shift control is high, what will be the binary content of the shift registers A and B after four clock pulses?

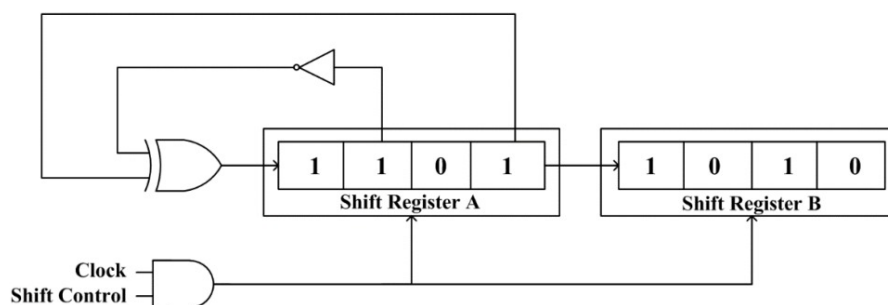


Figure 1: Shift register

- (a) A=1101,B=1101
- (b) A=1110,B=1001
- (c) A=0101,B=1101
- (d) A=1010,B=1111

(Gate IN 2023)