

GATE

1. For the given digital circuit, $A = B = 1$. Assume that AND, OR, and NOT gates have propagation delays of 10 ns, 10 ns, and 5 ns respectively. All lines have zero propagation delay. Given that $C = 1$ when the circuit is turned on, the frequency of steady-state oscillation of the output Y is _____.

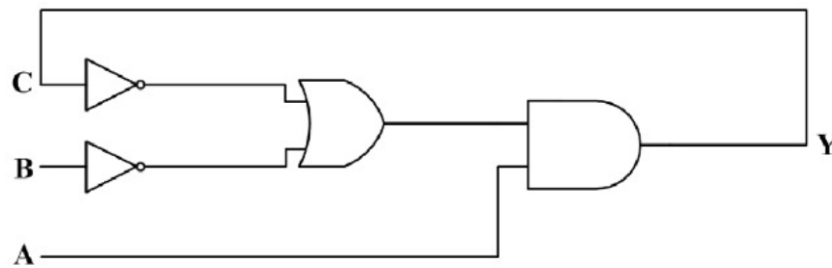


Figure 1: Image

- (a) 20 MHz
- (b) 15 MHz
- (c) 40 MHz
- (d) 50 MHz