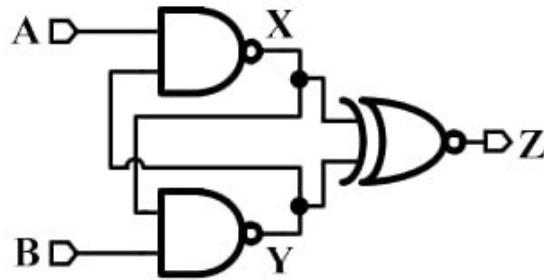


1. In the circuit diagram shown below, the logic gates operate with a supply voltage of 1V. NAND AND XNOR have $200ps$ and $400ps$ input-to-output delay, respectively.

At time $t = T$, $A(t) = 0$, $B(t) = 1$ and $Z(t) = 0$. When the inputs are changed to $A(t) = 1$, $B(t) = 0$ at $t = 2T$, a 1 V pulse is observed at Z . the pulse width of the 1V pulse is ps.

(GATE BM 2022)



- (a) $A = 100$
- (b) $A = 200$
- (c) $A = 400$
- (d) $A = 600$