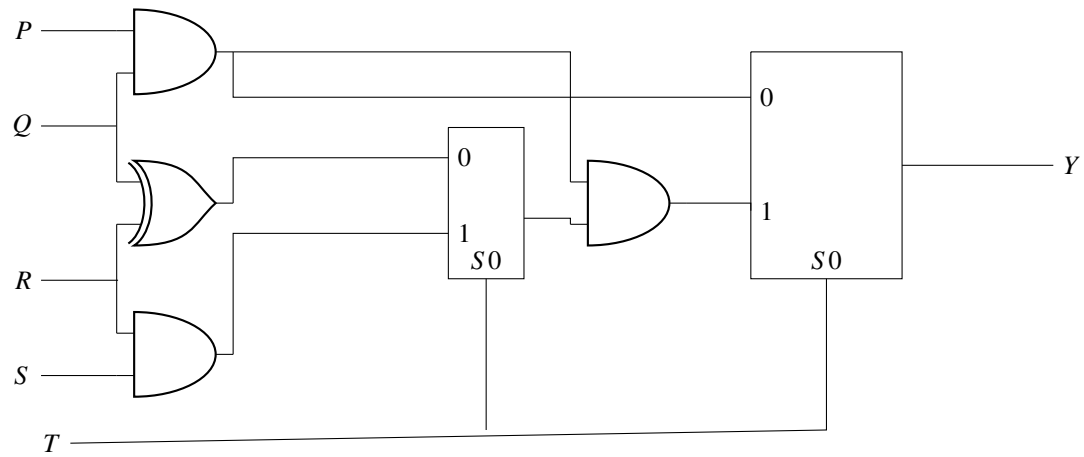


1. The propagation delays of the XOR gate, AND gate and multiplexer (*MUX*) in the circuit shown in the figure are  $4ns$ ,  $2ns$  and  $1ns$ , respectively. If all the inputs  $P, Q, R, S$  and  $T$  are applied simultaneously and held constant, the maximum propagation delay of the circuit is



1.  $3ns$
2.  $5ns$
3.  $6ns$
4.  $7ns$