

GATE-CS2021-28

December 2023

1. Consider a 3-bit counter, designed using T flip-flops, as shown below:

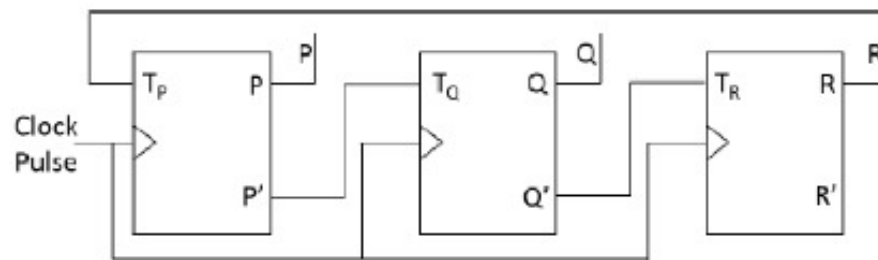


Figure 1

Assuming the initial state of the counter given by PQR as 000, what are the next three states?
(GATE-CS2021)

- (A) 011, 101, 000
- (B) 010, 101, 000
- (C) 010, 101, 000
- (D) 010, 101, 000