

34 Lecture - CS302

Important Mcqs

1. **What is the primary function of a shift register?**

- A) To store and shift binary data
- B) To perform arithmetic operations
- C) To generate clock pulses
- D) To amplify signals

Answer: A

What is the difference between a SISO and a SIPO shift register?

- A) SISO has a parallel input and a serial output, while SIPO has a serial input and a parallel output.
- B) SISO has a serial input and a serial output, while SIPO has a parallel input and a parallel output.
- C) SISO has only one flip-flop, while SIPO has multiple flip-flops.
- D) SISO can shift data in both directions, while SIPO can shift data in one direction only.

Answer: A

Which type of shift register has both parallel input and output?

- A) SISO
- B) PISO
- C) SIPO
- D) PIPO

Answer: D

What is the function of a parallel-in, parallel-out (PIPO) shift register?

- A) To convert serial data to parallel data
- B) To convert parallel data to serial data
- C) To shift data through the register in a serial fashion
- D) To store and output data in parallel

Answer: D

Which type of flip-flop is commonly used in shift register implementation?

- A) D flip-flop
- B) T flip-flop
- C) JK flip-flop
- D) All of the above

Answer: D

What is the purpose of clock pulses in a shift register?

- A) To store data
- B) To shift data
- C) To reset the circuit
- D) To amplify signals

Answer: B

How many clock pulses are required to shift data through a 4-bit shift register?

- A) 1

- B) 2
- C) 3
- D) 4

Answer: D

What is the advantage of using a SIPO shift register over a SISO shift register?

- A) Faster data transfer rate
- B) Lower hardware complexity
- C) Higher data storage capacity
- D) All of the above

Answer: C

Which type of shift register is commonly used for frequency division?

- A) SISO
- B) PISO
- C) SIPO
- D) PIPO

Answer: D

What is the purpose of delay lines in digital circuits?

- A) To store and shift data
- B) To filter signals
- C) To amplify signals
- D) To generate clock pulses

Answer: B