

37 Lecture - CS302

Important Mcqs

1. **What is the main benefit of reducing the number of input latches in a digital circuit?**

- A) Improved functionality
- B) Reduced power consumption
- C) Lower cost
- D) Faster performance

Answer: B

Which electronic devices can benefit from reduced input latches?

- A) Desktop computers
- B) Smartphones
- C) Televisions
- D) Printers

Answer: B

What is the trade-off when reducing the number of input latches in a digital circuit?

- A) Reduced complexity
- B) Increased functionality
- C) Improved performance
- D) Reduced flexibility

Answer: D

What is the primary purpose of input latches in a digital circuit?

- A) To store data temporarily
- B) To perform logical operations
- C) To amplify signals
- D) To convert analog to digital signals

Answer: A

Which factor is not considered when deciding to reduce the number of input latches in a digital circuit?

- A) Functionality
- B) Performance
- C) Cost
- D) Color

Answer: D

What is the main disadvantage of reducing the number of input latches in a digital circuit?

- A) Increased power consumption
- B) Reduced functionality
- C) Increased complexity
- D) Reduced flexibility

Answer: B

Which electronic devices typically have more input latches?

- A) Simple calculators

- B) Smartphones
- C) Digital watches
- D) Traffic lights

Answer: A

What is the role of a latch enable input in a digital circuit?

- A) To control the operation of the latch
- B) To store data temporarily
- C) To perform logical operations
- D) To convert analog to digital signals

Answer: A

Which type of digital circuit benefits the most from reducing the number of input latches?

- A) Simple circuits
- B) Complex circuits
- C) Low-power circuits
- D) High-performance circuits

Answer: B

What is the main advantage of reducing the number of input latches in a digital circuit?

- A) Increased complexity
- B) Reduced power consumption
- C) Higher cost
- D) Slower performance

Answer: B