

# 44 Lecture - CS302

## Important Mcqs

1. Which of the following is a fundamental component of a digital circuit that performs logical operations on binary inputs to produce binary outputs?

- A) Memory block
- B) Input/output block
- C) Logic block
- D) Clock generator

Answer: C) Logic block

What is the primary function of the combinational logic circuits in a logic block?

- A) Store and update information
- B) Perform logical operations on the inputs
- C) Generate clock signals
- D) Convert analog signals to digital signals

Answer: B) Perform logical operations on the inputs

Which of the following is a technology used to implement the logic block?

- A) Bluetooth
- B) Wi-Fi
- C) CMOS
- D) GPS

Answer: C) CMOS

What is the purpose of the sequential logic circuits in a logic block?

- A) Store and update information
- B) Perform logical operations on the inputs
- C) Generate clock signals
- D) Convert analog signals to digital signals

Answer: A) Store and update information

Which of the following digital systems is the logic block NOT an essential building block of?

- A) Microprocessors
- B) Memory devices
- C) Communication systems
- D) Analog circuits

Answer: D) Analog circuits

Which of the following factors does the design of the logic block depend on?

- A) Speed of operation
- B) Cost
- C) Power consumption
- D) All of the above

Answer: D) All of the above

Which block can be used in conjunction with the logic block to create complex digital

**systems?**

- A) Memory block
- B) Input/output block
- C) Clock generator
- D) Power supply

**Answer: A) Memory block**

**Which technology used to implement the logic block is known for its low power consumption?**

- A) CMOS
- B) TTL
- C) FPGA
- D) GPS

**Answer: A) CMOS**

**Which type of logic block circuit performs logical operations on the inputs in real-time without storing any information?**

- A) Combinational logic circuit
- B) Sequential logic circuit
- C) Both A and B
- D) None of the above

**Answer: A) Combinational logic circuit**

**Which of the following is NOT an example of a logic gate?**

- A) AND gate
- B) OR gate
- C) Memory gate
- D) XOR gate

**Answer: C) Memory gate**