

# 20 Lecture - CS302

## Important Mcqs

1. Which technique is used to implement a constant 0 signal in digital circuits? a. Pull-up resistor  
b. Pull-down resistor  
c. Logic gate output connection  
d. Both a and b

Answer: b. Pull-down resistor

2. Which technique is used to implement a constant 1 signal in digital circuits? a. Pull-up resistor b. Pull-down resistor c. Logic gate output connection d. Both a and b

Answer: a. Pull-up resistor

3. Which logic gate is commonly used to implement a pull-up resistor? a. AND gate b. OR gate c. NOT gate d. XOR gate

Answer: c. NOT gate

4. Which logic gate is commonly used to implement a pull-down resistor? a. AND gate b. OR gate c. NOT gate d. XOR gate

Answer: b. OR gate

5. What is the purpose of using a pull-up or pull-down resistor? a. To ensure a constant input signal b. To prevent signal fluctuations c. To increase the signal amplitude d. To decrease the signal amplitude

Answer: a. To ensure a constant input signal

6. What is the value of a pull-up resistor? a. Infinite resistance b. Zero resistance c. High resistance d. Low resistance

Answer: c. High resistance

7. What is the value of a pull-down resistor? a. Infinite resistance b. Zero resistance c. High resistance d. Low resistance

Answer: d. Low resistance

8. Which type of resistor is commonly used for pull-up or pull-down resistors? a. Carbon resistor b. Variable resistor c. Film resistor d. Semiconductor resistor

Answer: a. Carbon resistor

9. In which type of digital circuit is the implementation of constant signals crucial? a. Memory circuits b. Microprocessors c. Communication circuits d. Power circuits

Answer: b. Microprocessors

10. Which of the following is not a technique for implementing a constant signal? a. Pull-up resistor b. Pull-down resistor c. Logic gate output connection d. Variable resistor adjustment

Answer: d. Variable resistor adjustment