# 15 Lecture - CS302

# **Important Subjective**

#### 1. What is BCD code?

BCD stands for Binary Coded Decimal which is a coding scheme used to represent decimal numbers in binary form.

## 2. What is the purpose of BCD adder circuit?

The purpose of a BCD adder circuit is to add two BCD numbers and provide the output in BCD format.

## 3. How many digits can a BCD adder circuit handle?

A BCD adder circuit can handle up to four digits in each BCD number.

## 4. What is the significance of carry propagation in BCD adder?

Carry propagation is important in BCD adder as it carries the carry from one digit to the next when the sum of two digits exceeds nine.

#### 5. What is the difference between a BCD adder and a binary adder?

A BCD adder operates on binary coded decimal numbers, while a binary adder operates on binary numbers.

#### 6. What is a half adder?

A half adder is a combinational circuit that adds two single-bit binary numbers and produces a sum and carry bit as output.

#### 7. What is a full adder?

A full adder is a combinational circuit that adds three single-bit binary numbers and produces a sum and carry bit as output.

#### 8. What is the difference between a half adder and a full adder?

A half adder can only add two single-bit binary numbers, while a full adder can add three single-bit binary numbers.

# 9. What is ripple carry adder?

A ripple carry adder is a type of adder circuit where the carry output from each stage is fed as an input to the next stage.

#### 10. What is carry lookahead adder?

A carry lookahead adder is a type of adder circuit that uses lookahead logic to calculate carry bits, resulting in faster operation than a ripple carry adder.