## 38 Lecture - CS302

## Important Subjective

1. Define an equation.

Answer: An equation is a mathematical statement that asserts the equality of two expressions. It consists of a left-hand side, a right-hand side, and an equals sign between them.

## How is an equation used in solving a problem?

Answer: Equations are used to describe relationships between variables and to solve problems in a wide range of fields, including physics, engineering, and finance. Solving an equation involves finding the values of the variables that make both sides of the equation equal.

What is the purpose of an equals sign in an equation?
Answer: The equals sign is used to separate the left-hand side and right-hand side of an equation and to indicate that they are equal.

What is the difference between an equation and an expression?
Answer: An equation is a statement that asserts the equality of two expressions, while an expression is a combination of numbers, variables, and mathematical operations.

What is the solution of an equation?
Answer: The solution of an equation is the value of the variable that makes both sides of the equation equal.

## What is the process of solving an equation?

Answer: The process of solving an equation involves finding the values of the variables that make both sides of the equation equal.

## What is a linear equation?

Answer: A linear equation is an equation in which the highest power of the variable is one.

## What is a quadratic equation?

Answer: A quadratic equation is an equation in which the highest power of the variable is two.

## What is a simultaneous equation?

Answer: A simultaneous equation is a set of equations with more than one unknown variable, where the solution must satisfy all the equations at the same time.

## What is an open sentence in mathematics?

Answer: An open sentence in mathematics is a statement that contains one or more variables and becomes a true or false statement when specific values are substituted for the variables.

