

## **Engineering Mathematics III**

## **Discrete Mathematics**

#### Lecture 2

Set Theory: Introduction, Principle of Inclusion and Exclusion (Part 2)

This course is taught to Computer Science Engineering students in SMIT, India during Jun-Dec, 2019.

#### Combination of two sets

- $A \cup B$ : Union of two sets
- $A \cap B$ : Intersection of two sets
- $A \setminus B$  or A B: Difference of two sets
- ullet  $A^c$  or A: Complement of a Set

# Principle of Inclusion and Exclusion

## **Examples**

## **Cartesian Product**

## Relations

## Questions?

# Thank you

