Classical Sets

Consider a classical set where X denotes universal sets . The elements in the universe X will be denoted as x. Examples of elements of various universes might be as follows.

– The clock speeds of computers CPUs.

– The operating temperature of an air conditioner.

– The operating currents of an electronic motor or a generator set.

– The integers 1–100.

2.2.1 Operations on Classical Sets

Union $$A \cup B = \{x/x \in A \text{ or } x \in B\}.$$

Intersection $$A \cap B = \{x/x \in A \text{ and } x \in B\}.$$

Complement $$\overline{A} = \{x/x \notin A, x \in X\}$$

Difference $$A|B = \{x/x \in A \text{ and } x \notin B\}$$