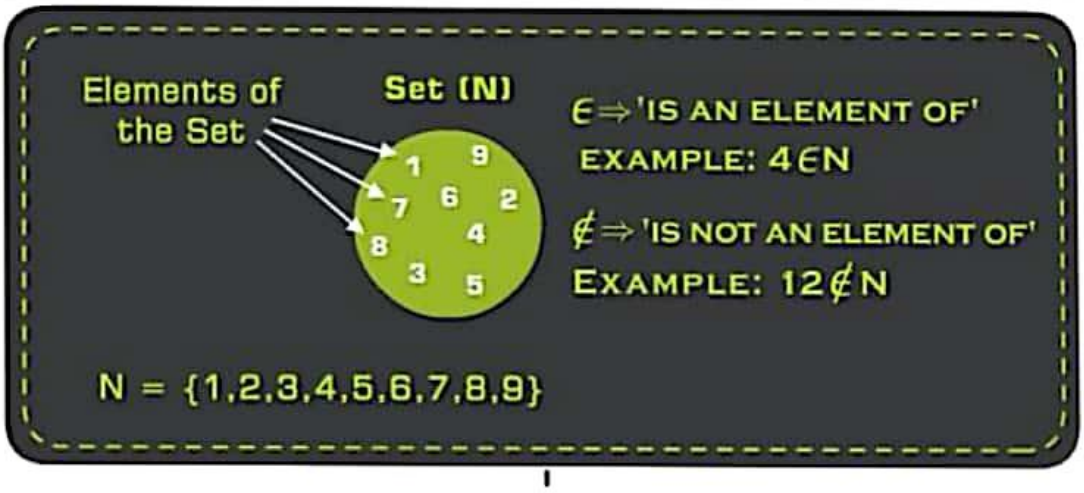
SET

Part I

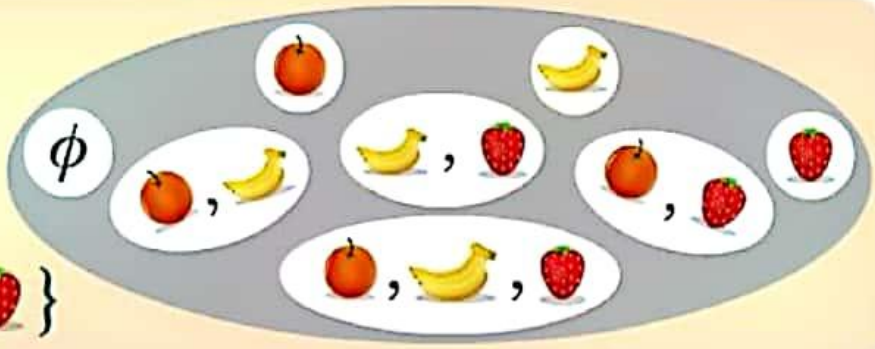
A SET IS A WELL DEFINED COLLECTION OF OBJECTS.



1. POWER SET

POWER SET P(A)

SET A = { , , }



2. EMPTY SET

NO ELEMENT

{ } or ϕ

3. FINITE SET

FINITE NUMBER OF ELEMENT

5. SUBSET

A⊆B,

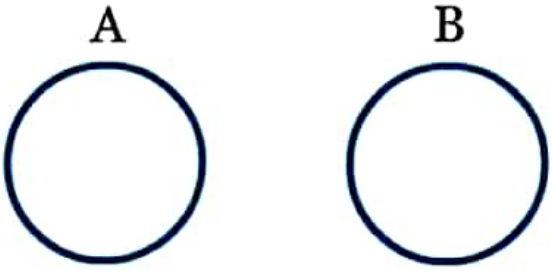
∈A ⇒ ∈B

4. EQUAL SET

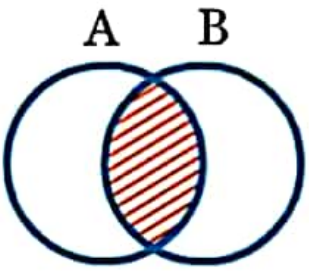
A = B IF A⊆B & B⊆A

Part II

OPERATION OF SETS

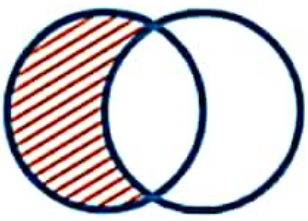


DISJOINT SET A AND B



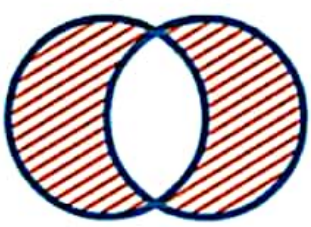
A∩B

THE INTERSECTION OF A AND B



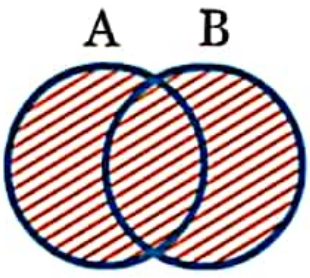
A\B

THE RELATIVE COMPLEMENT OF B IN A



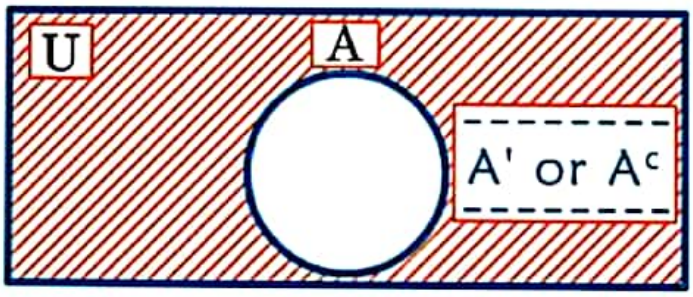
AΔB

THE SYMMETRIC DIFFERENCE OF A AND B

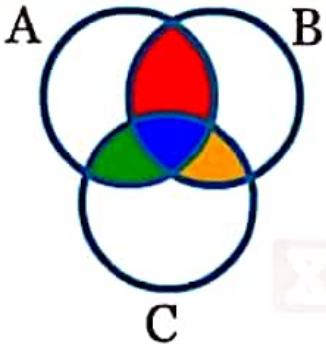


AUB

THE UNION OF A AND B



COMPLEMENT OF SET A



A∩B∩C

$$A \cup B \cup C = A + B + C - (A \cap B) - (B \cap C) - (C \cap A) + (A \cap B \cap C)$$