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Faculty of Engineering and Technology

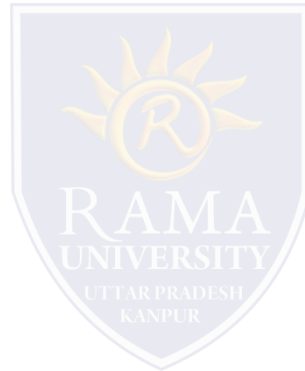
Discrete Mathematics
(CSPS-111)

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Outlines

- **Set Identities**

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Set Identities

- Identity: $A \cup \emptyset = A$ $A \cap U = A$
- Domination: $A \cup U = U$ $A \cap \emptyset = \emptyset$
- Idempotent: $A \cup A = A = A \cap A$
- Double complement: $A \cup B = B \cup A$ $A \cap B = B \cap A$
- Commutative: $A \cup (B \cap C) = (A \cup B) \cap C$
- Associative: $A \cap (B \cap C) = (A \cap B) \cap C$



