- 1) Implement and Verify De Morgan's Law.
- 2) Implement and Verify half adder using NAND Gate.

## SET-2

- 1) Implement and Verify Full adder using NAND Gate.
- 2) Simplify the flowing Boolean Expression
  - i) AB(A+B)(B+B)

#### **SET-3**

- 1) Implement and Verify Full Sub-tractor.
- 2) Simplify the flowing Boolean Expression
  - i) (A+C)(AD+AD)+AC+C

# **SET-4**

- 1) Implement and Verify Full Sub-tractor.
- 2) Simplify the flowing Boolean Expression
  - i) A (A+B) + (B+AA) (A+B)

## **SET-5**

1) Implement and Verify Multiplexer.

## **SET-6**

- 1) Implement and Verify Full Sub-tractor.
- 2) Simplify the flowing Boolean Expression
  - i) A (A + B) + (B + AA) (A + B)

## **SET-7**

- 1) Implement and Verify De Morgan's Law.
- 2) Simplify the flowing Boolean Expression
  - i) Y + X (Y + Z) + Y (Y + Z)

#### **SET-8**

- 1) Implement and Verify Half Sub-tractor.
- 2) Simplify the flowing Boolean Expression
  - i) x \* y \* z + x \* z

#### SET-9

- 1) Implement the Boolean expression simplification-AB (A+B) (B+B)
- 2) Implement and verify Full Sub-Tractor.

# **SET-10**

- 1) Implement the Boolean expression simplification-AB (A+B) (B+B)
- 3) Implement and Verify Half Sub-tractor.

## **SET-11**

- 1) Implement and verify Full Sub-Tractor.
- 2) Simplify the flowing Boolean Expression

$$Y + X (Y + Z) + Y (Y + Z)$$

## **SET-12**

- 1) Implement and Verify Full adder using NAND Gate.
- 2) Simplify the flowing Boolean Expression

$$Y + X (Y + Z) + Y (Y + Z)$$