

## Experiment 09

### Group B1

- a. Implement the Following Boolean Function Using
  - I. 1 to 8-Line De-Multiplexer /3 to 8-Line Decoder (IC-74138)
  - II. 1 to 16-Line De-Multiplexer /4 to 16-Line Decoder (IC-74154)

$$F(A, B, C, D) = \sum (1, 3, 4, 8, 12, 14)$$

- b. Implement the Following Boolean Function Using
  - I. An 8 to 1-Line Multiplexer (IC-74151)
  - II. A 4 to 1-Line Multiplexer (IC-74153)

And Other Basic Gates.

$$F(A, B, C, D) = \sum (1, 3, 4, 8, 12, 14)$$