

## GATE QUESTION ECE 2010 Q39

### Question.52

A minimized form of the function  $F$  is:

(A)  $F = \overline{X}Y + YZ$

(C)  $F = \overline{X}\overline{Y} + Y\overline{Z}$

(B)  $F = \overline{X}\overline{Y} + YZ$

(D)  $F = \overline{X}\overline{Y} + \overline{Y}Z$

### Solution.52

Function  $F$  can be minimized by grouping all 1's in the K-map as following:

		YZ			
		00	01	11	10
X	0	1	1	1	0
	1	0	0	1	0

$$F = \overline{X}\overline{Y} + YZ$$

Hence, (B) is the correct option.