

EXPERIMENT-06, Group B1

- a. Design a Combinational Logic Circuit to Convert the code Excess-3 to 2, 4, 2, 1 Code.
- b. A seven-segment display device (fig-b) is capable to display both alphabets and decimal digits. You need to design a combinational circuit which will show the active segments for 0,2,3,4,5,8, 9 (decimal).

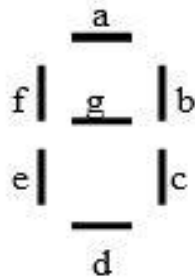


Fig.: b

The following table represents the active segments for each decimal digit.

Digit	Segments Activated
0	a,b,c,d,e,f
1	b,c
2	a,b,d,e,g
3	a,b,c,d,g
4	b,c,f,g
5	a,c,d,f,g
6	a,c,d,e,f,g
7	a,b,c
8	a,b,c,d,e,f,g
9	a,b,c,d,f,g

- c. Design a Combinational Logic Circuit to Convert the 5-Bit BCD to Binary Equivalent.