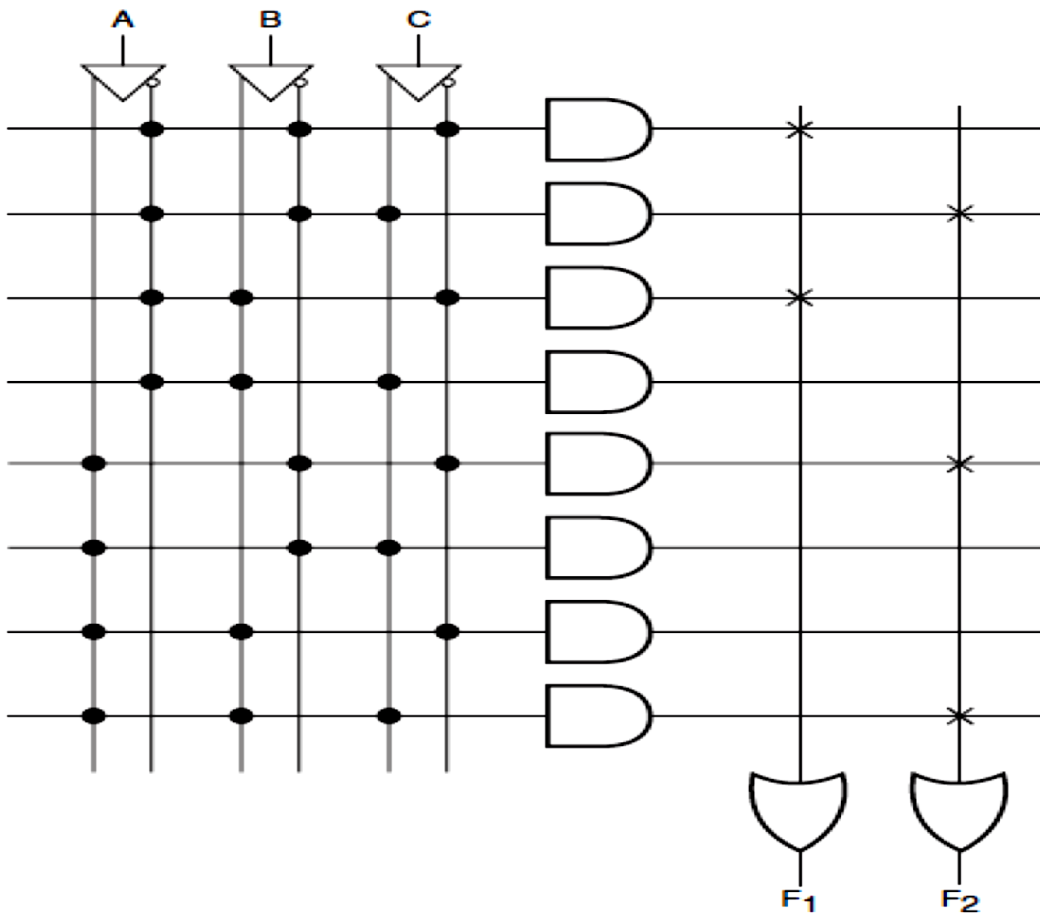


Q5: implement the Boolean function using 8X2 PROM

$$F_1(A, B, C) = \sum (0, 2)$$

$$F_2(A, B, C) = \sum (1, 4, 7)$$



Q6: implement X,Y and Z with PLA of figure below:

$$P1 = \bar{A}\bar{C}$$

$$P2 = \bar{A}C$$

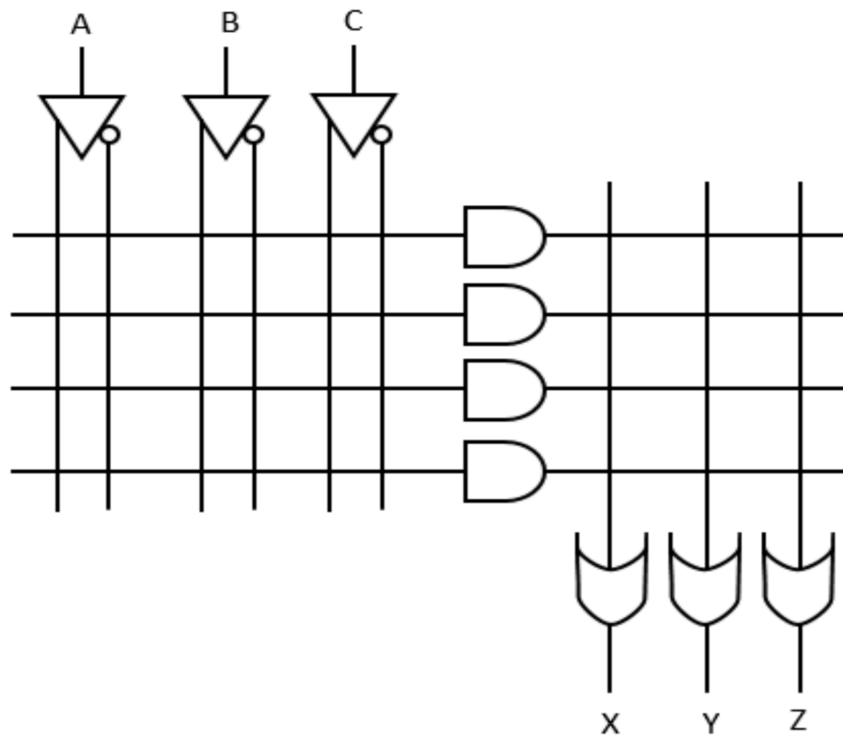
$$P3 = A\bar{B}$$

$$P4 = ABC$$

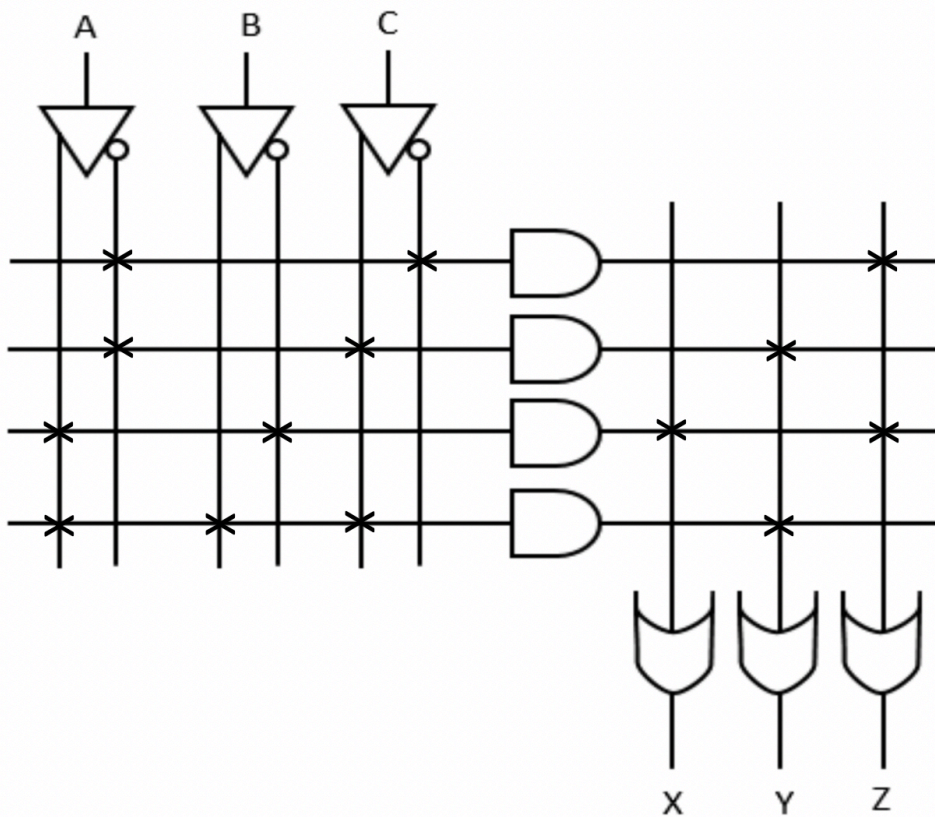
$$X = P3$$

$$Y = P2 + P4$$

$$Z = P1 + P3$$



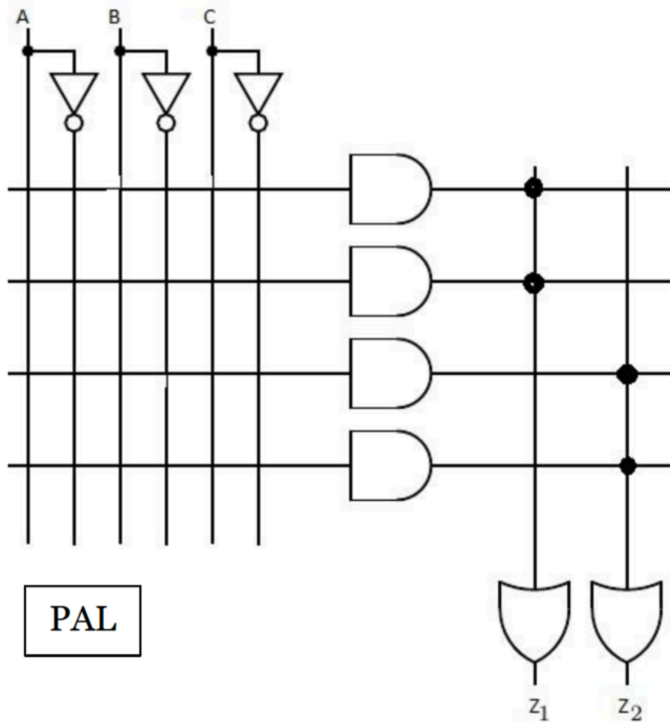
Sol:



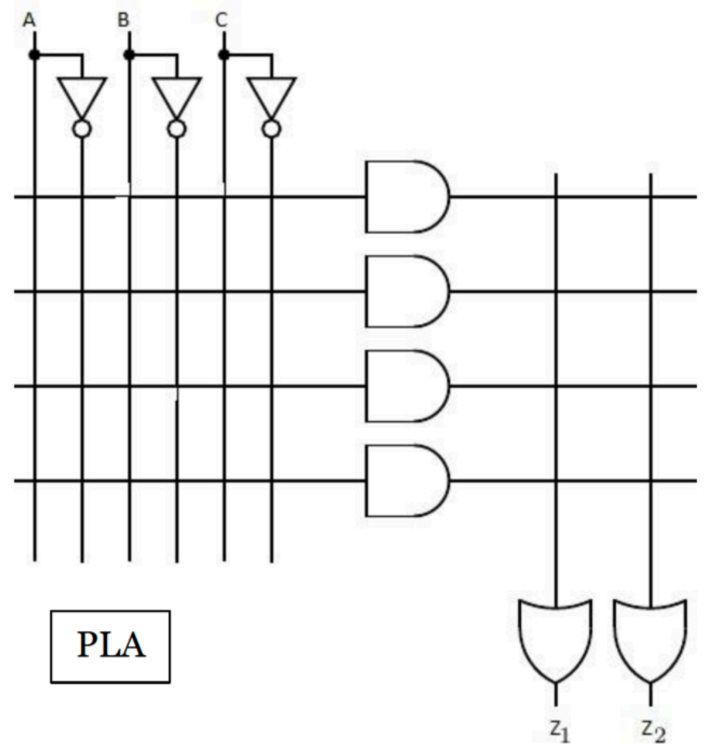
Q7: design digital circuit to execute the function below by using PROM ,PLA and PAL

$$Z_1 = \bar{a}\bar{b}c + abc$$

$$Z_2 = \bar{a}b\bar{c} + ab\bar{c}$$

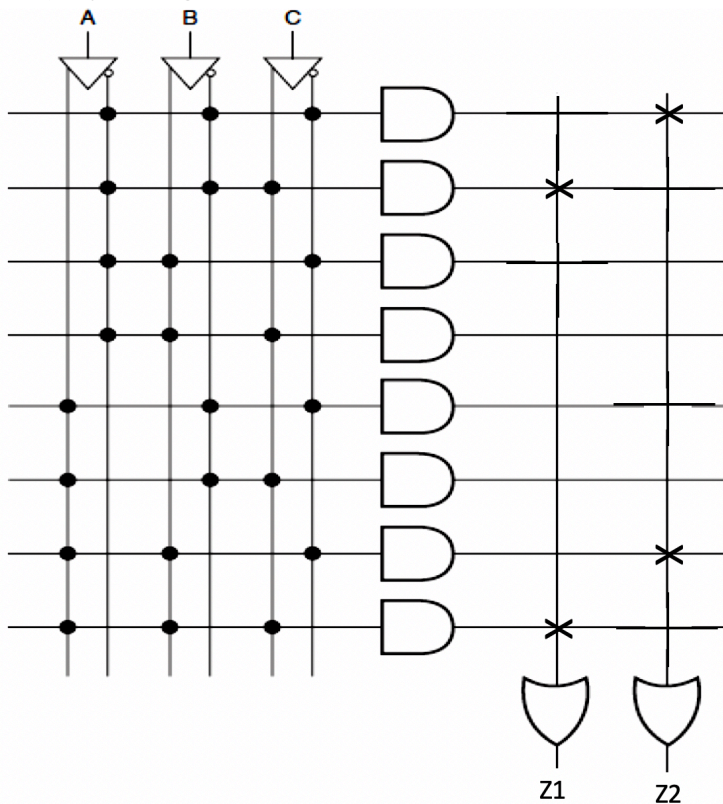


PAL

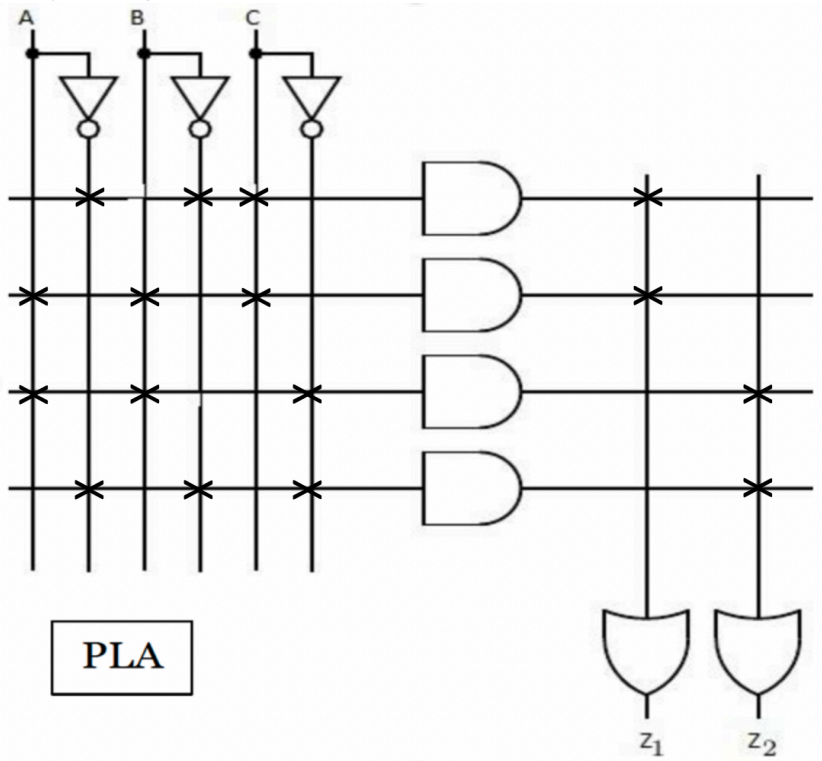


PLA

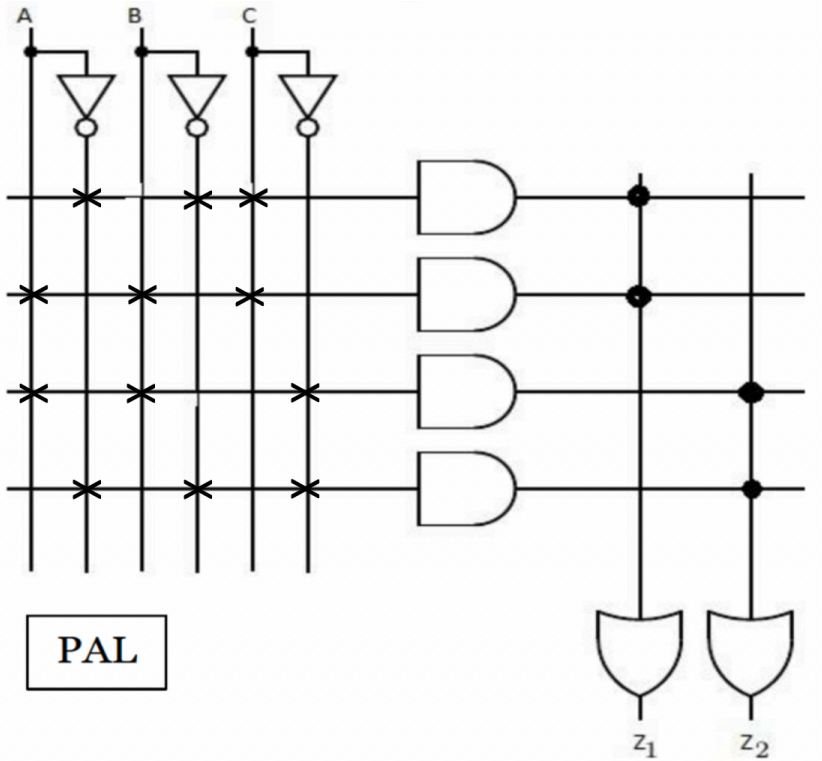
Sol: a) by using PROM



B) by using PLA



c) by using PAL



Q8: implement the Boolean function using 8X2 PROM

$$F1 = \sum 1,3,5$$

$$F2 = \sum 2,6,7$$

