

# Quiz No 3

NAME

ASHFAQ AHMAD

Reg No

19PW CSE 1795

Section

B

Subject

CS-II

Q1:  $G_{min}$

$$Z = aw - bx - cy + d \quad \text{--- (1)}$$

$$a = b = c = d = 1 + 7 + 9 + 5 \\ = 22$$

eq (1) become

$$Z = 22w - 22x - 22y + 22$$

Replace  $\rightarrow$

$$z = V_z$$

$$w = V_w$$

$$x = V_x$$

$$y = V_y$$

So

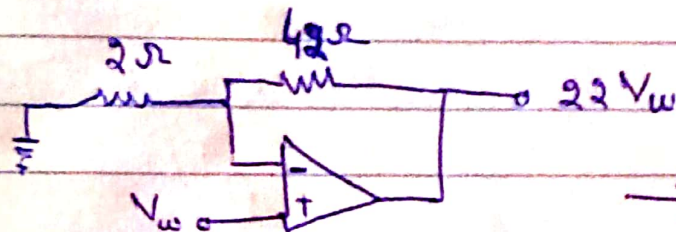
$$V_z = 22V_w - 22V_x - 22V_y + 22$$

$$P + T + 0$$

(1)

→ Now for  $22V_w$ .

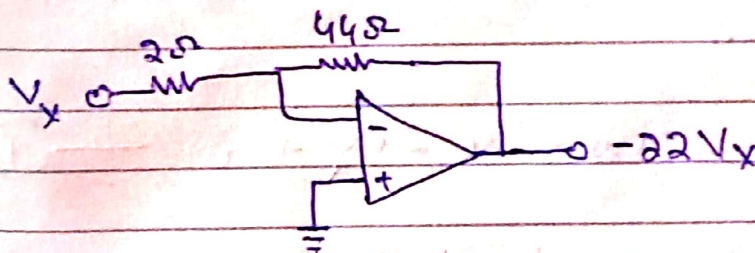
$$V_w \rightarrow [22] \rightarrow 22V_w \rightarrow B.D$$



→ OP AMP

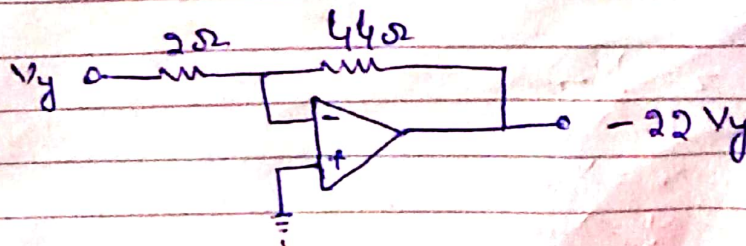
→ for  $-22V_x$

$$V_x \rightarrow [-22] \rightarrow -22V_x$$



→ for  $-22V_y$

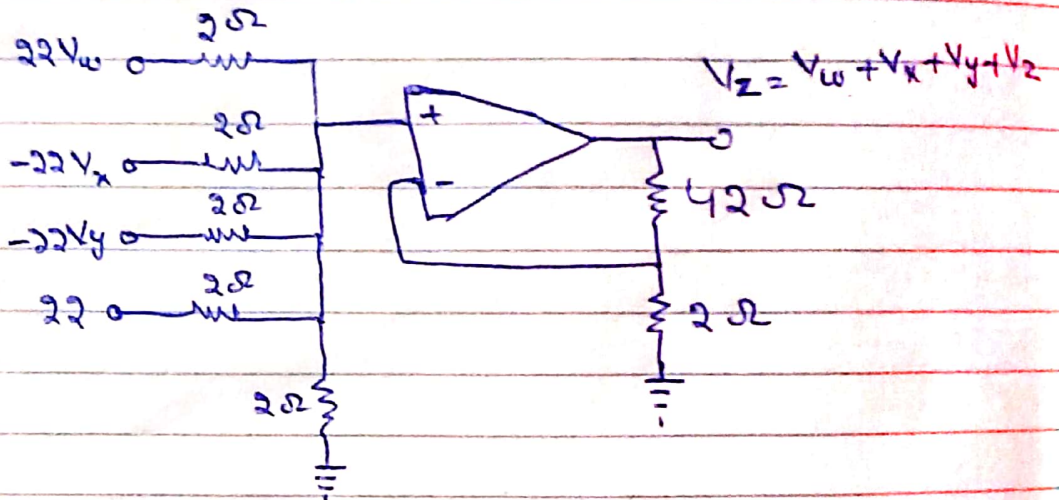
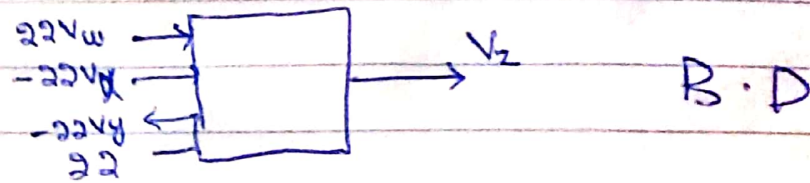
$$V_y \rightarrow [-22] \rightarrow -22V_y$$



P & T p a



Now



→ Final Circuit diagram.

