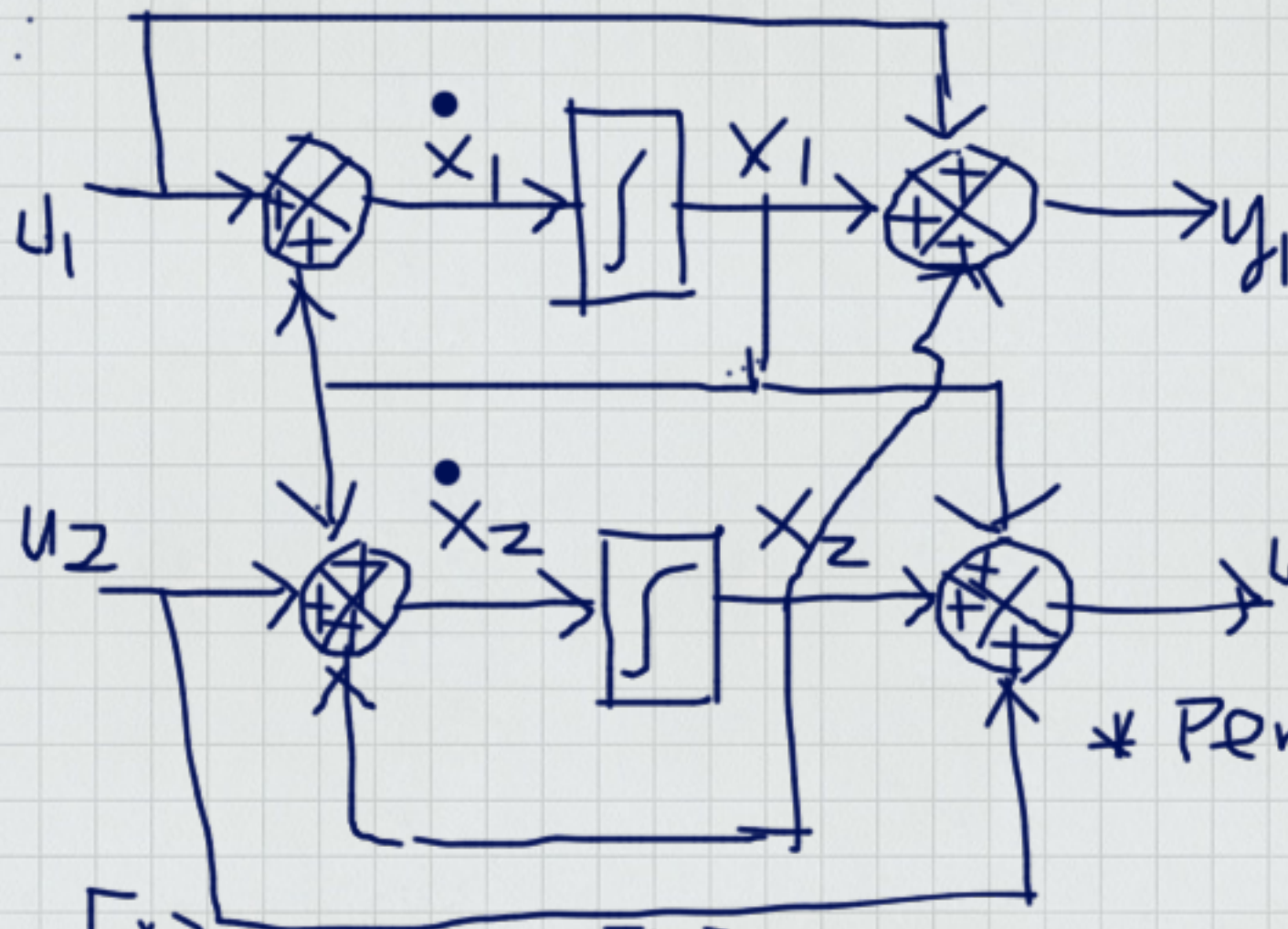


Soln :



2 input $\rightarrow m=2$
 2 peubah $\rightarrow n=2$
 keadaan
 2 output $\rightarrow k=2$
 dimensi:

$$A [2 \times 2] \quad B [2 \times 1]$$

$$C [2 \times 2] \quad D [2 \times 1]$$

* Per / Keadaan:

$$\dot{x}_1 = x_1 + u_1$$

$$\dot{x}_2 = x_1 + x_2 + u_2$$

* Per / Keluaran

$$y_1 = x_1 + x_2 + u_1$$

$$y_2 = x_1 + x_2 + u_2$$

TAMAT!

$$\dot{x} = \underbrace{\begin{bmatrix} 1 & 0 \\ 1 & 1 \end{bmatrix}}_{[A]} x + \underbrace{\begin{bmatrix} 1 & 0 \\ 0 & 1 \end{bmatrix}}_{[B]} u$$

$$y = \underbrace{\begin{bmatrix} 1 & 1 \\ 1 & 1 \end{bmatrix}}_{[C]} x + \underbrace{\begin{bmatrix} 1 & 0 \\ 0 & 1 \end{bmatrix}}_{[D]} u$$