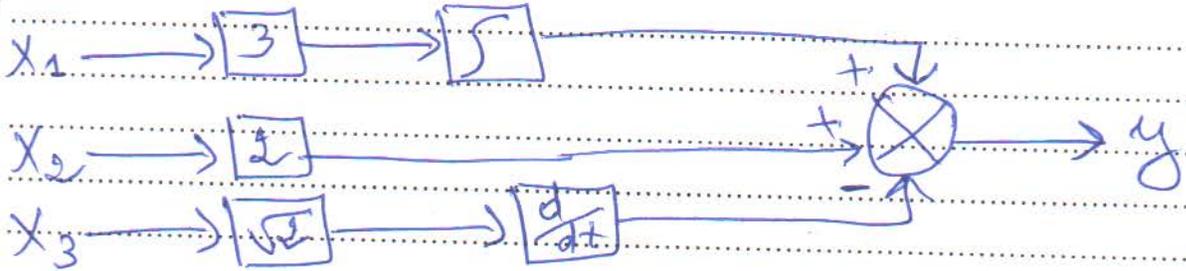


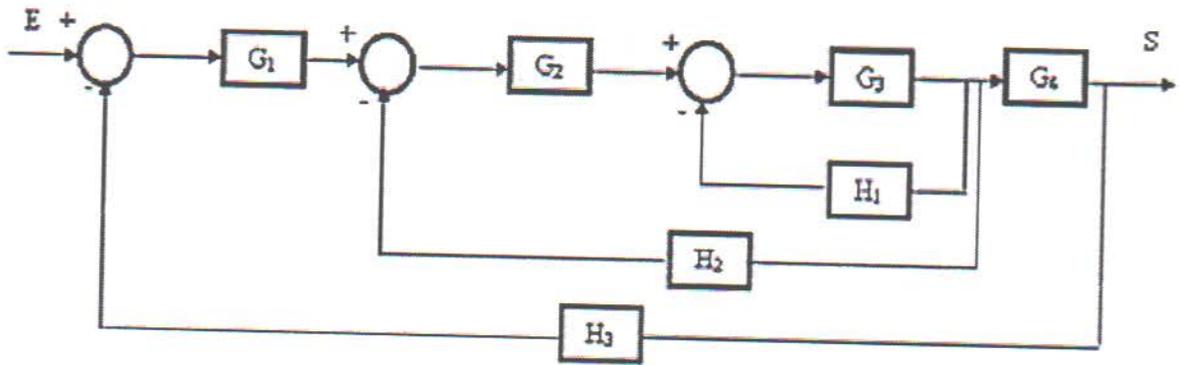
3

$$2). Y = 3 \int x_1 dt + 2X_2 - \sqrt{2} \cdot \frac{dx_3}{dt}$$



5

Q2. Simplifier puis calculer la fonction de Transfer du schéma fonctionnel suivant :



$$z_1 = \frac{G_3}{1 \pm H_1 \cdot G_3}, \quad z_2 = G_2 \cdot z_1, \quad z_3 = \frac{z_2}{1 \pm z_2 \cdot H_2}$$

$$z_4 = G_1 \cdot z_3 \cdot G_4, \quad z_5 = \frac{z_4}{1 \pm z_4 \cdot H_3}$$

$$\frac{S}{E} = F.T = z_5$$