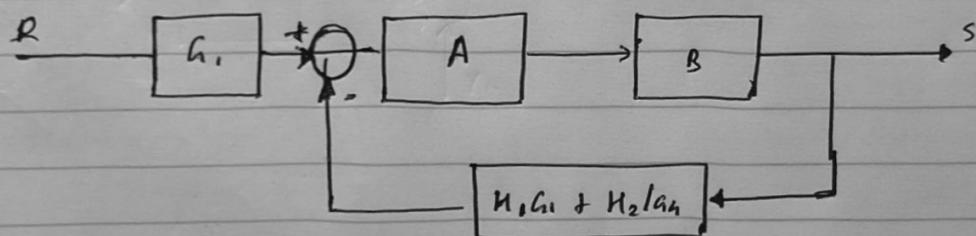
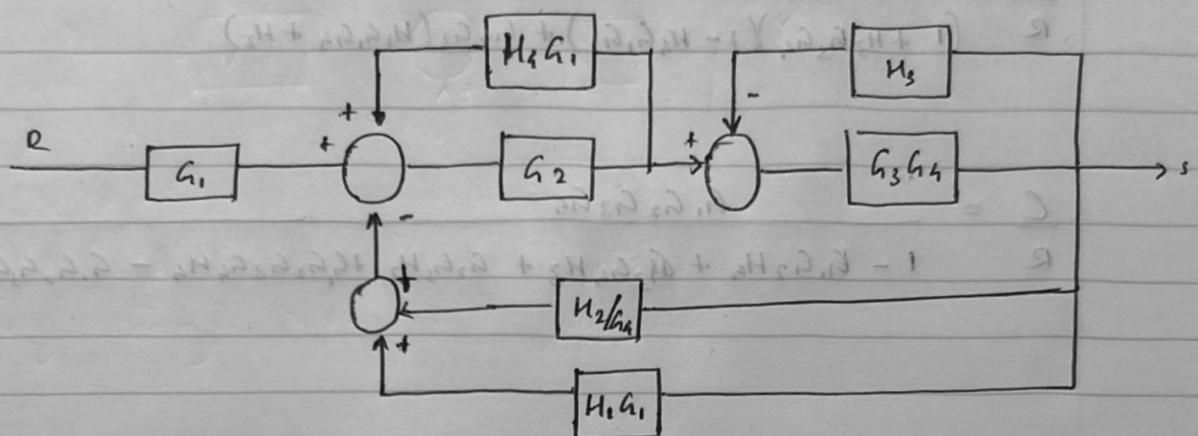
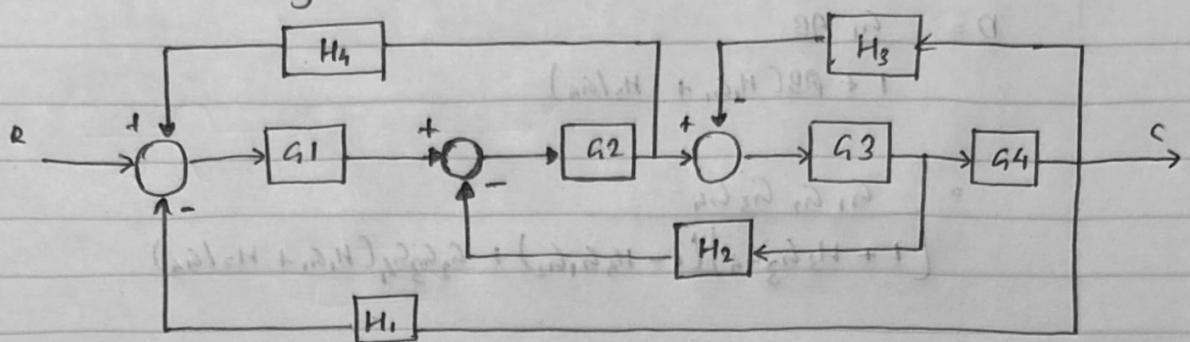
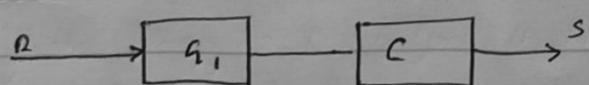


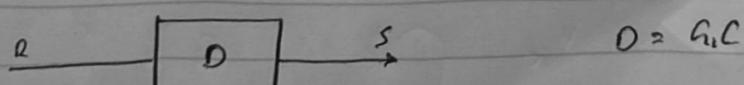
Week 02 - Activity 02



$$A = \frac{G_2}{1 - H_4G_1G_2}, \quad B = \frac{G_3G_4}{1 + H_3G_3G_4}$$



$$C = \frac{AB}{1 + AB(H_1G_1 + H_2/G_4)}$$

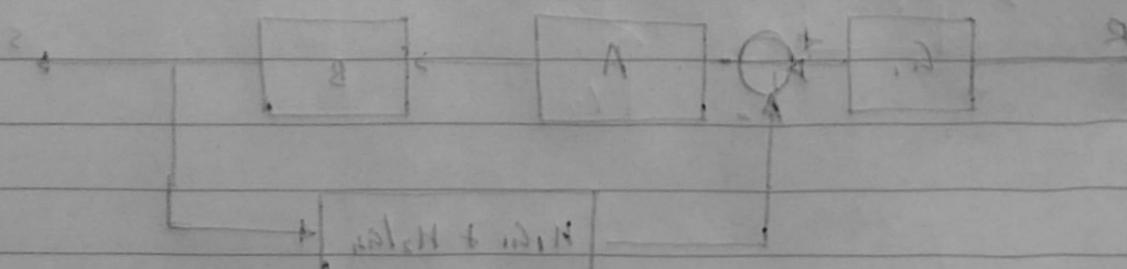


$$D = \frac{G_1 AB}{1 + AB(H_1 G_1 + H_2 G_2)}$$

$$= \frac{G_1 G_2 G_3 G_4}{(1 + H_3 G_3 G_4)(1 - H_4 G_1 G_2) + G_2 G_3 G_4 (H_1 G_1 + H_2 G_2)}$$

$$\frac{C}{R} = \frac{G_1 G_2 G_3 G_4}{(1 + H_3 G_3 G_4)(1 - H_4 G_1 G_2) + G_1 G_3 (H_1 G_1 G_4 + H_2)}$$

$$\frac{C}{R} = \frac{G_1 G_2 G_3 G_4}{1 - G_1 G_2 H_4 + G_3 G_4 H_3 + G_2 G_3 H_2 + G_1 G_2 G_3 G_4 H_3 - G_1 G_2 G_3 G_4 H_3 H_4}$$



$$\frac{H_1 G_1 G_4}{H_1 G_1 G_2 H_4 + 1} = B \quad \frac{H_4 G_1 G_2}{H_4 G_1 G_2 H_3 + 1} = A$$

