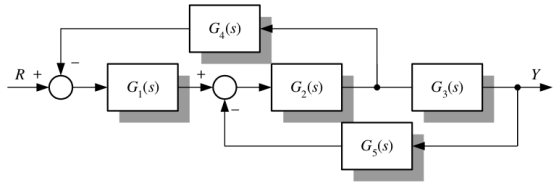
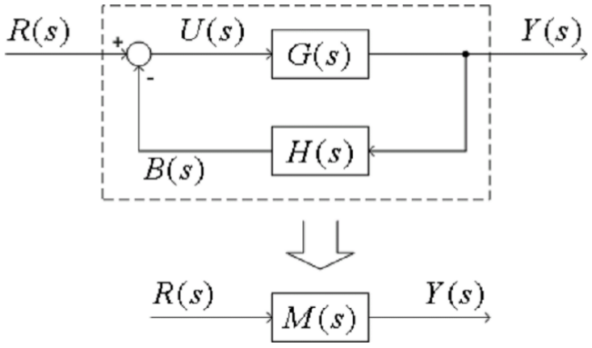
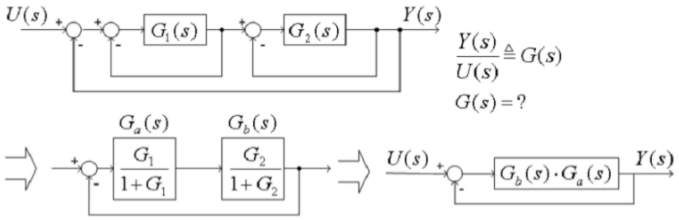
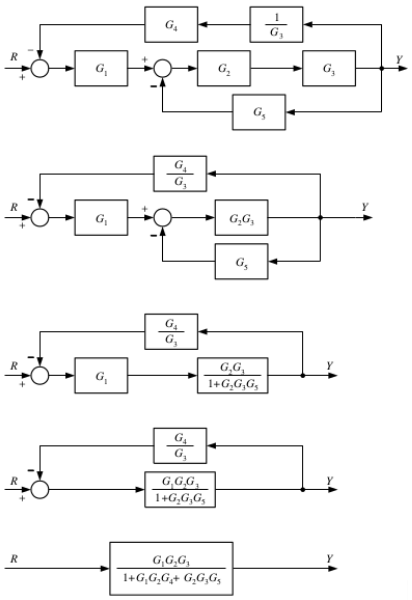


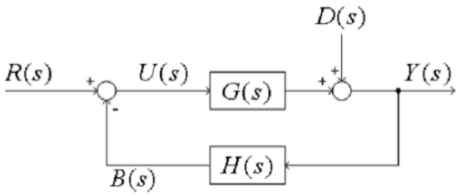
<Fig> Block Diagram

Sol.) $$G(s)=\frac{G_1G_2G_3}{1+G_1G_2G_4+G_2G_3G_5}$$









$$Y(s)=D(s)+(-1)G(s)H(s)Y(s)$$

$$\therefore (1+G(s)H(s))Y(s)=D(s)$$

$$\therefore Y(s)=\frac{1}{1+G(s)H(s)}D(s)$$