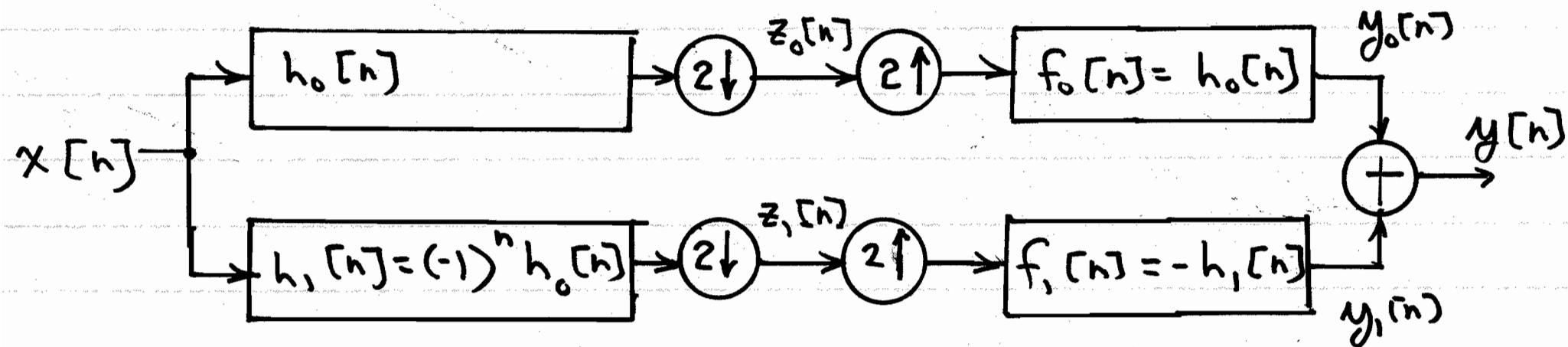


$$Z_0(\omega) = \frac{1}{2} H_0\left(\frac{\omega}{2}\right) X\left(\frac{\omega}{2}\right) + \frac{1}{2} H_0\left(\frac{\omega-2\pi}{2}\right) X\left(\frac{\omega-2\pi}{2}\right)$$

$$Y_0(\omega) = \frac{1}{2} H_0^2(\omega) X(\omega) + \frac{1}{2} H_0(\omega) H_0(\omega-\pi) X(\omega-\pi)$$



$$Z_1(\omega) = \frac{1}{2} H_1\left(\frac{\omega}{2}\right) X\left(\frac{\omega}{2}\right) + \frac{1}{2} H_1\left(\frac{\omega-2\pi}{2}\right) X\left(\frac{\omega-2\pi}{2}\right)$$

$$Y_1(\omega) = -H_0^2(\omega-\pi) \frac{1}{2} X(\omega) - H_0(\omega) H_0(\omega-\pi) \frac{1}{2} X(\omega-\pi)$$

$$H_1(\omega) = H_0(\omega-\pi)$$

$$H_1(\omega-\pi) = H_0(\omega-2\pi) = H_0(\omega)$$

$$Y(\omega) = \left\{ H_0^2(\omega) - H_0^2(\omega-\pi) \right\} \frac{1}{2} X(\omega)$$