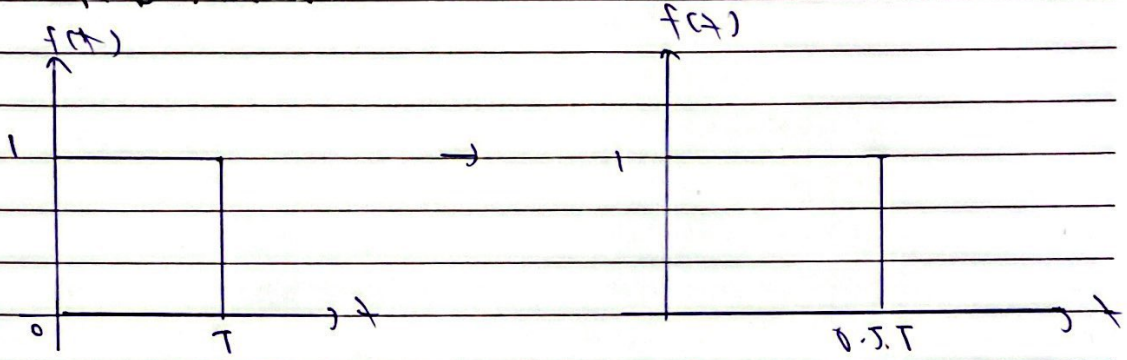


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BL12 3

SIGNAL AND SYSTEMS



$$F(s) = \int_0^T [1 - e^{-sT}]$$

$$F(s) = ?$$

$$F(s) = \int \{f(t)\} = \int_0^{\infty} f(t) e^{-st} dt$$

$$= \int_0^{0.5} 1 \cdot e^{-st} dt$$

$$= 1 \cdot \left[\frac{e^{-st}}{-s} \right]_0^{0.5}$$

$$= \left[\frac{e^{-0.5s} - 1}{-s} \right]$$

$$F(s) = \frac{1 - e^{-0.5s}}{s} \quad \#$$