

**Problem 7.11**

(a) The transmission bandwidth of the BASK signal is effectively defined by

$$B_T = \frac{2}{T_b}$$

where  $T_b$  is the bit duration. With  $T_b = 1 \mu\text{s}$ , we therefore have

$$\begin{aligned} B_T &= \frac{2}{10^{-6}} \text{ Hz} \\ &= 2 \text{ MHz} \end{aligned}$$

(b)

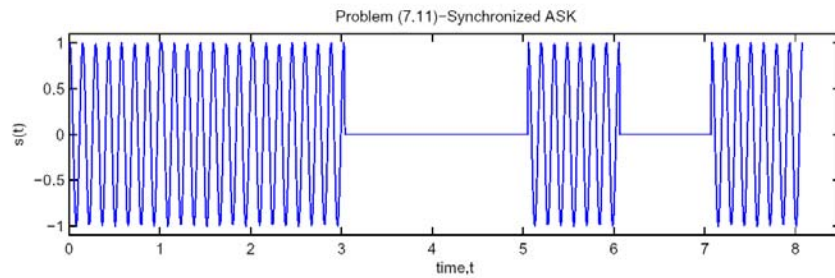


Figure 1

In the waveform plotted in Fig. 1, time  $t$  is measured in microseconds.