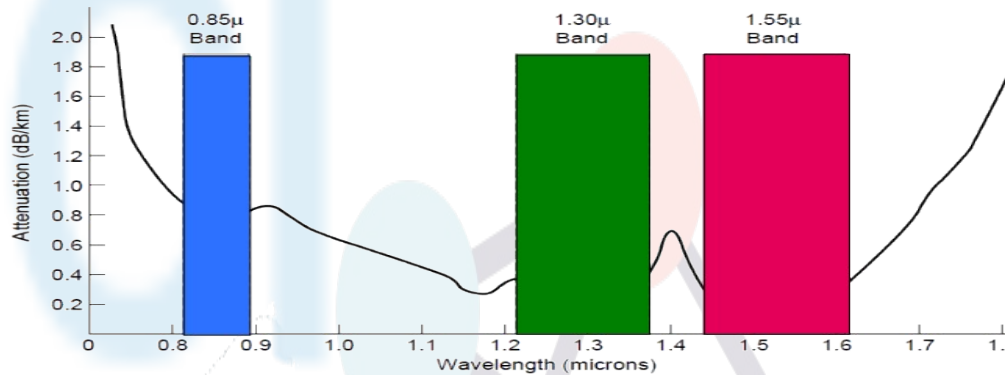Ejercicios de capa física

2.5 In Fig. 2-5, the left-hand band is narrower than the others. Why?

2.13 Television channels are 6 MHz wide. How many bits/sec can be sent if four-level digital signals are used? Assume a noiseless channel.

2.14 If a binary signal is sent over a 3-kHz channel whose signal-to-noise ratio is 20 dB, what is the maximum achievable data rate?

2.46 In a typical mobile phone system with hexagonal cells, it is forbidden to reuse a frequency band in an adjacent cell. If 840 frequencies are available, how many can be used in a given cell?

2.48 Make a rough estimate of the number of PCS microcells 100 m in diameter it would take to cover San José (45 square km).