EC 8395 Communication Engineering

Important 2mark Questions

Unit I

1. What is the relationship between phase modulation and frequency modulation?
2. What will be the power in each sideband in amplitude modulated signal if power of carrier wave is 176 W and there is 60% modulation.
3. What is Pre-emphasis and De-emphasis circuit? Where these circuits are used?
4. A signal m(t), band limited to 5 kHz is multiplied by a carrier wave $cos(\omega_t t)$ to yield a DSB-SC signal S(t). For what value of the carrier frequency, will the bandwidth of S(t) be 2% of f_c.

Unit II

1. What is sampling and quantization?
2. What is meant by aliasing? How do you avoid aliasing?
3. What is bit depth in PCM?
4. What is Companding?

Unit III

1. What is Duobinary encoding? Why precoding is used.
2. Draw the constellation diagram of QPSK.
3. Draw the modulated waveform representing PSK and FSK.
4. Explain the term 'ISI'? How do you alleviate ISI?

Unit IV

1. Define entropy.
2. What is prefix code? Give examples.
3. What is the need of channel coding?
4. List the properties of cyclic codes?

Unit V

1. What are the benefits of multiple access techniques in the communication system?
2. Define near-far problem in CDMA.
3. What is decoding?
4. What is the aim of error control coding? List the different error control mechanisms.