

EC 8491 Communication Theory

Important 13mark questions

Unit I

1. Explain in detail the generation and demodulation of DSB-SC with a simple diagram.
2. Derive the expression for amplitude modulated wave and explain any one method to generate and demodulate it.

Unit II

1. Explain the characteristics and features of demodulation of FM signal with a neat diagram.
2. Explain the direct method of FM generation.

Unit III

1. Describe the properties of power spectral density.
2. Explain in detail about the transmission of a random process through a linear time invariant filter.

Unit IV

1. Explain pre-emphasis and de-emphasis in FM system with a neat diagram.
2. Derive the figure of merit for AM system. Assume envelope detection.

Unit V

1. Explain the working of PWM with a neat sketch.
2. State Shannon's various theorems and explain.