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- 1. Orthogonal Frequency Division Multiplexing (OFDM) technology is used in
- 2. A key feature of the wireless channel is
- 3. The popular waveform employed in 3G wireless standards is
- 4. The probability density function of the Gaussian random variable *X* with zero-mean and variance $\sigma^2 = \frac{1}{2}$ is given as
- 5. The linear combination of jointly Gaussian random variables yields
- 6. MIMO technology for wireless employs
- 7. The peak downlink (DL) data rate of a 4G LTE system is approximately
- 8. The *Q*-function Q(x) for the Gaussian random variable is defined as
- 9. The standard l_2 norm $\|\bar{\mathbf{x}}\|$ of a possibly complex vector $\bar{\mathbf{x}} = [x_1 \quad x_2 \quad ... \quad x_n]^T$ is defined as
- 10. Which of the following is not a digital modulation format?

Answer:

- 1. 4G
- 2. Fading Wireless Channel Coefficient
- 3. WCDMA
- 4. $F_X(x) = \frac{1}{\sqrt{\pi}} e^{-x^2}$
- 5. Gaussian random variable
- 6. multiple transmitters and receivers
- 7. 100Mbps
- $8. \quad \int_{x}^{\infty} \frac{1}{\sqrt{2\pi}} e^{-\frac{x^2}{2}} dx$
- 9. $\sqrt{\sum_{i=1}^{n} x_1 \overline{x}_1}$
- 10. Options Not mentioned!