

# SP25C - Pre-Instructional Survey

Name \_\_\_\_\_ Date \_\_\_\_\_

1. Identify which frequency band is being used in many wireless network systems.
  - A. ~120 MHz
  - B. ~960 MHz
  - C. ~2400 MHz
  - D. ~3200 MHz
  
2. List the three most prevalent methods of multiplexing techniques.
  - A. \_\_\_\_\_
  - B. \_\_\_\_\_
  - C. \_\_\_\_\_
  
3. List the principle differences between an 802.11 system and a Bluetooth system.
  
4. List the three techniques that are used, sometimes in conjunction with one another, to provide increased data security in a wireless network.
  - A. \_\_\_\_\_
  - B. \_\_\_\_\_
  - C. \_\_\_\_\_
  
5. List the limiting factors in using a cellular telephone network for wireless data transmission.
  - A. \_\_\_\_\_
  - B. \_\_\_\_\_
  - C. \_\_\_\_\_
  
6. Which system is easier to initially implement?
  - A. Narrowband
  - B. Frequency Hopping spread spectrum
  - C. Direct Sequence spread spectrum

- 7 List three benefits associated with having a wireless sensor.
- A. \_\_\_\_\_
  - B. \_\_\_\_\_
  - C. \_\_\_\_\_
8. Circle the name of the organization that regulates the use of the frequency spectrum within the United States.
- A. Dept of Energy
  - B. Federal Communications Commission
  - C. NASA

## SP25C - Pre-Instructional Survey Answer Sheet

1. C. 2400 MHz
2. TDMA, FDMA, CDMA
3. 802.11 has higher data transfer rate, consumes more power, has a larger radiated footprint, is more expensive
4. encryption, scrambling, spread spectrum techniques
5. integration difficulties, variations in cellular telephony infrastructure, susceptibility to latency and variable attenuation (dropouts)
6. A. Narrowband
7. Ease of installation, reduced maintenance costs, small form factors
8. B. Federal Communications Commission