

IC85C - Pre-Instructional Survey

Name _____ Date _____

1. Which technique gives you the most secure communications channel:

- a. DSSS
- b. FHSS
- c. Narrowband

2. True or False.

In Code Division Multiple Access, messages are delivered across the communication channel sequentially.

3. Which network design is the most robust (from a failure standpoint)?

- a. star topology
- b. linear bus topology
- c. mesh topology

4. Match the multiplexing scheme with the choir analogy.

CDMA Each person sings a short solo at the same pitch.
FDMA Multiple people can sing, but each has an individual pitch.
TDMA Everyone sings whenever they want, but in different languages.

5. Which wireless scheme has the longest operating range?

- a. Bluetooth
- b. ISA100.11a
- c. 802.11b
- d. Cellular Telephony

6. The term used to describe the signal-to-noise advantage that spread spectrum has over narrow band radio transmissions due to “chipping” is:
- a. antenna gain
 - b. multipath interference
 - c. process gain
 - d. differential gain

7. True or False.

Narrowband signaling is more susceptible to impulse noise corruption than spread spectrum signaling.

8. Which is NOT an appropriate method that can be used by multiple wireless systems to allow them to operate within the same geographical location using the same frequency band.
- a. Different codes under a code-division, multiple access (CDMA) protocol.
 - b. Different modulation schemes.
 - c. Different radio signal polarities (horizontal, vertical, circular).
 - d. All of these are appropriate.

9. Which frequency range is being used extensively for 802.11 and Bluetooth wireless communications?
- a. 868 MHz
 - b. 1700 MHz
 - c. 2400 MHz
 - d. 3250 MHz

10. Which network topology has most advantage when implemented in wireless technology?
- a. Bus
 - b. Mesh
 - c. Star
 - d. None of these will work in a wireless network

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1. a
2. False
3. c
4. CDMA-Bottom, FDMA-Middle, TDMA-Top
5. d
6. c
7. True
8. d
9. c
10. c