

KNOWLEDGE PROBE 1: INTRODUCTION TO WIRELESS TECHNOLOGY

Wireless Operation

Learning Objectives

1. Identify basic components of any wireless system.
2. Describe how radio works.
 1. Which was invented first?
 - a. Electric lights
 - b. Telegraph
 - c. Telephone
 - d. Wireless
 2. What is the name often given to the communications medium for wireless?
 - a. Ether
 - b. Open air
 - c. Space
 - d. Vacuum
 3. Which wireless applications came first?
 - a. Broadcast radio
 - b. Facsimile radio
 - c. Two way radio
 - d. Wireless remote control
 4. What undesirable problem occurs when any wireless information signal transmitted?
 - a. Circuits generate undesirable spurious signals
 - b. Interfering signals get added
 - c. Malfunctions occur
 - d. Noise gets added
 5. What is the name given to the original information signal?
 - a. Baseband
 - b. Broadband
 - c. Carrier
 - d. Modulating signal



6. An original information signal may be transmitted directly by wireless.
 - a. True
 - b. False
7. One way wireless is known as
 - a. Full duplex
 - b. Half duplex
 - c. Simplex
 - d. Unidirectional
8. Simultaneous two way communications is known as
 - a. Dual mode
 - b. Full duplex
 - c. Half duplex
 - d. Simplex
9. The combination of a transmitter and a receiver is called a
 - a. Radio
 - b. Transceiver
 - c. Transponder
 - d. Two way set
10. A radio wave is a(an)
 - a. Combination of electric and magnetic fields
 - b. Electric field
 - c. Magnetic field
 - d. Plasma
11. The basic antenna is called a
 - a. Dipole
 - b. Monopole
 - c. Rabbit ears
 - d. Yagi
12. What is the name of the mathematical relationships that describe a radio wave?
 - a. Faraday's law
 - b. Maxwell's equations
 - c. Quadratic equations
 - d. Tesla's rule
13. The speed of light is about
 - a. 300,000 meters per second
 - b. 186,400 feet per second
 - c. A mile a second
 - d. 186,400 miles per second



14. Any antenna may be use for both transmission and reception.
- a. True
 - b. False
15. What is the angle of propagation of a radio wave with respect to the fields?
- a. 0°
 - b. 90°
 - c. 120°
 - d. 180°