

Name \_\_\_\_\_

**MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.**

- 1) More than one signal can be carried by a radio wave using a process called \_\_\_\_\_. 1) \_\_\_\_\_  
A) sideband operation  
B) frontband operation  
C) frequency modulation  
D) amplitude modulation
- 2) XM radio service uses \_\_\_\_\_ to transmit the audio signal. 2) \_\_\_\_\_  
A) satellites  
B) repeater towers  
C) both A and B  
D) neither A nor B
- 3) Technician A says that radios receive AM and FM signals that are broadcast through the air. 3) \_\_\_\_\_  
Technician B says that the radio antenna is used to induce a very large voltage signal as an input into the radio from the electromagnetic energy from the broadcast station. Who is right?  
A) Technician A only  
B) Technician B only  
C) Both technicians  
D) Neither technician
- 4) Technician A says that a braided ground wire is best to use for audio equipment to help reduce 4) \_\_\_\_\_  
interference. Technician B says to use insulated 14 gauge or larger ground wire to reduce  
interference. Who is right?  
A) Technician A only  
B) Technician B only  
C) Both technicians  
D) Neither technician
- 5) The number of times a particular waveform repeats itself in a given amount of time (frequency) 5) \_\_\_\_\_  
is measured in \_\_\_\_\_.  
A) Hertz  
B) Coulombs  
C) Ersteads  
D) Watts
- 6) A bolt of lightning generates broad radio frequency bandwidths known as \_\_\_\_\_. 6) \_\_\_\_\_  
A) frequency modulation (FM)  
B) electromagnetic interference (EMI)  
C) radio frequency interference (RFI)  
D) both B and C

- 7) 100,000  $\mu\text{F}$  means \_\_\_\_\_. 7) \_\_\_\_\_  
A) 0.10 farad  
B) 0.01 farad  
C) 0.001 farad  
D) 0.0001 farad
- 8) If two 4 ohm speakers are connected in parallel, meaning positive (+) to positive (+) and negative (-) to negative (-), the total impedance will be \_\_\_\_\_. 8) \_\_\_\_\_  
A) 8 ohms  
B) 6 ohms  
C) 2 ohms  
D) 1 ohm
- 9) All of these can cause radio interference, EXCEPT \_\_\_\_\_. 9) \_\_\_\_\_  
A) defective alternator  
B) fault in the ignition system  
C) loose ground wire  
D) open in the radio power circuit
- 10) An antenna lead-in wire should have how many ohms of resistance between the center terminal and the grounded outer covering? 10) \_\_\_\_\_  
A) Less than 5 ohms  
B) 5-50 ohms  
C) 300-500 ohms  
D) Infinity (OL)