

Name: _____ **ID #:** _____

1. In a communication system, noise is most likely to affect the signal:
 - (a) At the transmitter
 - (b) In the channel
 - (c) In the information source
 - (d) At the destination

2. Indicate the false statement. Modulation is used to:
 - (a) Reduce the bandwidth used
 - (b) Separate differing transmissions
 - (c) Ensure that intelligence may be transmitted over long distances
 - (d) Allow the use of practicable antennas.

3. In a low-level AM system, amplifiers following the modulated stage must be:
 - (a) Linear devices
 - (b) Harmonic devices
 - (c) Class C amplifiers
 - (d) Nonlinear devices

4. If the carrier of a 100 percent modulated AM wave is suppressed, the percentage power saving will be:
 - (a) 50
 - (b) 150
 - (c) 100
 - (d) 66.66

5. To provide two or more voice circuits with the same carrier, it is necessary to use:
 - (a) ISB
 - (b) Carrier reinsertion
 - (c) SSB with pilot carrier
 - (d) Lincompex

6. The modulation index of an AM wave is changed from 0 to 1. The transmitted power is:
 - (a) Unchanged
 - (b) Halved
 - (c) Doubled
 - (d) Increased by 50 percent

7. A carrier is simultaneously modulated by two sine waves with modulation indices of 0.3 and 0.4; the total modulation index:
- (a) is 1
 - (b) cannot be calculated unless the phase relations are known
 - (c) is 0.5
 - (d) is 0.7
8. Indicate the false statement regarding the advantages of SSB over double sideband, full carrier AM:
- (a) More channel space is available
 - (b) Transmitter circuits must be more stable, giving better reception
 - (c) The signal is more noise-resistant
 - (d) Much less power is required for the same signal strength