

HamRadioSchool.com Technician License Course Section 7.1 Question Pool

T7C01 (A)

What is the primary purpose of a dummy load?

- A. To prevent transmitting signals over the air when making tests
- B. To prevent over-modulation of a transmitter
- C. To improve the efficiency of an antenna
- D. To improve the signal-to-noise ratio of a receiver

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T7C12 (B)

What does a dummy load consist of?

- A. A high-gain amplifier and a TR switch
- B. A non-inductive resistor and a heat sink
- C. A low-voltage power supply and a DC relay
- D. A 50 ohm reactance used to terminate a transmission line

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T9A01 (C)

What is a beam antenna?

- A. An antenna built from aluminum I-beams
- B. An omnidirectional antenna invented by Clarence Beam
- C. An antenna that concentrates signals in one direction
- D. An antenna that reverses the phase of received signals

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T9A02 (A)

Which of the following describes a type of antenna loading?

- A. Inserting an inductor in the radiating portion of the antenna to make it electrically longer
- B. Inserting a resistor in the radiating portion of the antenna to make it resonant
- C. Installing a spring in the base of a mobile vertical antenna to make it more flexible
- D. Strengthening the radiating elements of a beam antenna to better resist wind damage

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T9A03 (B)

Which of the following describes a simple dipole oriented parallel to the Earth's surface?

- A. A ground-wave antenna
- B. A horizontally polarized antenna
- C. A rhombic antenna
- D. A vertically polarized antenna

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T9A05 (C)

How would you change a dipole antenna to make it resonant on a higher frequency?

- A. Lengthen it
- B. Insert coils in series with radiating wires
- C. Shorten it
- D. Add capacitive loading to the ends of the radiating wires

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T9A06 (C)

What type of antennas are the quad, Yagi, and dish?

- A. Non-resonant antennas
- B. Log periodic antennas
- C. Directional antennas
- D. Isotropic antennas

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T9A07 (A)

What is a disadvantage of using a handheld VHF transceiver, with its integral antenna, inside a vehicle?

- A. Signals might not propagate well due to the shielding effect of the vehicle
- B. It might cause the transceiver to overheat
- C. The SWR might decrease, decreasing the signal strength

D. All of these choices are correct

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T9A08 (C)

What is the approximate length, in inches, of a quarter-wavelength vertical antenna for 146 MHz?

- A. 112
- B. 50
- C. 19
- D. 12

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T9A09 (C)

What is the approximate length, in inches, of a half-wavelength 6 meter dipole antenna?

- A. 6
- B. 50
- C. 112
- D. 236

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T9A10 (C)

In which direction does a half-wave dipole antenna radiate the strongest signal?

- A. Equally in all directions
- B. Off the ends of the antenna
- C. Broadside to the antenna
- D. In the direction of the feed line

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T9A11 (C)

What is the gain of an antenna?

- A. The additional power that is added to the transmitter power
- B. The additional power that is lost in the antenna when transmitting on a higher frequency
- C. The increase in signal strength in a specified direction compared to a reference antenna
- D. The increase in impedance on receive or transmit compared to a reference antenna

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T9A12 (A)

What is an advantage of using a properly mounted 5/8 wavelength antenna for VHF or UHF mobile service?

- A. It has a lower radiation angle and more gain than a 1/4 wavelength antenna
- B. It has very high angle radiation for better communicating through a repeater
- C. It eliminates distortion caused by reflected signals
- D. It has 10 times the power gain of a 1/4 wavelength design

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