

0.1 Section 1 6 questions

T1A01 [97.3(a)(4)]

For whom is the Amateur Radio Service intended?

- A. Persons who have messages to broadcast to the public
- B. Persons who need communications for the activities of their immediate family members, relatives and friends
- C. Persons who need two-way communications for personal reasons
- D. Persons who are interested in radio technique solely with a personal aim and without pecuniary interest

T1B01 [97.3(a)(28)]

What is the ITU?

- A. An agency of the United States Department of Telecommunications Management
- B. A United Nations agency for information and communication technology issues
- C. An independent frequency coordination agency
- D. A department of the FCC

T1C02

Which of the following is a valid US amateur radio station call sign?

- A. KMA3505
- B. W3ABC
- C. KDKA
- D. 11Q1176

T1D02 [97.111(a)(5)]

On which of the following occasions may an FCC-licensed amateur station exchange messages with a U.S.

military station?

- A. During an Armed Forces Day Communications Test
- B. During a Memorial Day Celebration
- C. During an Independence Day celebration
- D. During a propagation test

T1E02 [97.7(a)]

Who is eligible to be the control operator of an amateur station?

- A. Only a person holding an amateur service license from any country that belongs to the United Nations
- B. Only a citizen of the United States

C. Only a person over the age of 18

D. Only a person for whom an amateur operator/primary station license grant appears in the FCC database or who is authorized for alien reciprocal operation

T1F02 [97.119 (a)]

When using tactical identifiers, how often must your station transmit the station's FCC-assigned call sign?

- A. Never, the tactical call is sufficient
- B. Once during every hour
- C. Every ten minutes
- D. At the end of every communication

0.2 Section 2 3 questions

T2A03

What is a common repeater frequency offset in the 70 cm band?

- A. Plus or minus 5 MHz
- B. Plus or minus 600 kHz
- C. Minus 600 kHz
- D. Plus 600 kHz

T2B01

What is the term used to describe an amateur station that is transmitting and receiving on the same frequency?

- A. Full duplex communication
- B. Diplex communication
- C. Simplex communication
- D. Half duplex communication

T2C07

What should you do to minimize disruptions to an emergency traffic net once you have checked in?

- A. Whenever the net frequency is quiet, announce your call sign and location
- B. Move 5 kHz away from the net's frequency and use high power to ask other hams to keep clear of the net frequency
- C. Do not transmit on the net frequency until asked to do so by the net control station
- D. Wait until the net frequency is quiet, then ask for any emergency traffic for your area

0.3 Section 3 3 questions

T3A02

Why are UHF signals often more effective from inside buildings than VHF signals?

- A. VHF signals lose power faster over distance
- B. The shorter wavelength allows them to more easily penetrate the structure of buildings
- C. This is incorrect; VHF works better than UHF inside buildings
- D. UHF antennas are more efficient than VHF antennas

T3B03

What are the two components of a radio wave?

- A. AC and DC
- B. Voltage and current
- C. Electric and magnetic fields
- D. Ionizing and non-ionizing radiation

T3C02

Which of the following might be happening when VHF signals are being received from long distances?

- A. Signals are being reflected from outer space
- B. Signals are arriving by sub-surface ducting
- C. Signals are being reflected by lightning storms in your area
- D. Signals are being refracted from a sporadic E layer

0.4 Section 4 2 questions

T4A08

Which type of conductor is best to use for RF grounding?

- A. Round stranded wire
- B. Round copper-clad steel wire
- C. Twisted-pair cable
- D. Flat strap

T4B02

Which of the following can be used to enter the operating frequency on a modern transceiver?

- A. The keypad or VFO knob
- B. The CTCSS or DTMF encoder
- C. The Automatic Frequency Control
- D. All of these choices are correct

0.5 Section 5 4 questions

T5A01

Electrical current is measured in which of the following units?

- A. Volts
- B. Watts
- C. Ohms
- D. Amperes

T5B05

Which of the following is equivalent to 500 milliwatts?

- A. 0.02 watts
- B. 0.5 watts
- C. 5 watts
- D. 50 watts

T5C02

What is the basic unit of capacitance?

- A. The farad
- B. The ohm
- C. The volt
- D. The henry

T5D04

What is the resistance of a circuit in which a current of 3 amperes flows through a resistor connected to 90 volts?

- A. 3 ohms
- B. 30 ohms
- C. 93 ohms
- D. 270 ohms

0.6 Section 6 4 questions

T6A02

What type of component is often used as an adjustable volume control?

- A. Fixed resistor
- B. Power resistor
- C. Potentiometer
- D. Transformer

T6B07

What does the abbreviation "LED" stand for?

- A. Low Emission Diode
- B. Light Emitting Diode

- C. Liquid Emission Detector
- D. Long Echo Delay

T6C01

What is the name for standardized representations of components in an electrical wiring diagram?

- A. Electrical depictions
- B. Grey sketch
- C. Schematic symbols
- D. Component callouts

T6D06

What component is commonly used to change 120V AC house current to a lower AC voltage for other uses?

- A. Variable capacitor
- B. Transformer
- C. Transistor
- D. Diode

0.7 Section 7 4 questions

T7A03

What is the function of a mixer in a superheterodyne receiver?

- A. To reject signals outside of the desired passband
- B. To combine signals from several stations together
- C. To shift the incoming signal to an intermediate frequency
- D. To connect the receiver with an auxiliary device, such as a TNC

T7B05

What is a logical first step when attempting to cure a radio frequency interference problem in a nearby telephone?

- A. Install a low-pass filter at the transmitter
- B. Install a high-pass filter at the transmitter
- C. Install an RF filter at the telephone
- D. Improve station grounding

T7C04

What reading on an SWR meter indicates a perfect impedance match between the antenna and the feedline?

- A. 2 to 1
- B. 1 to 3
- C. 1 to 1

- D. 10 to 1

T7D08

Which of the following types of solder is best for radio and electronic use?

- A. Acid-core solder
- B. Silver solder
- C. Rosin-core solder
- D. Aluminum solder

0.8 Section 8 4 questions

T8A03

Which type of voice modulation is most often used for long-distance or weak signal contacts on the VHF and UHF bands?

- A. FM
- B. AM
- C. SSB
- D. PM

T8B04

Which amateur stations may make contact with an amateur station on the International Space Station using 2 meter and 70 cm band amateur radio frequencies?

- A. Only members of amateur radio clubs at NASA facilities
- B. Any amateur holding a Technician or higher class license
- C. Only the astronaut's family members who are hams
- D. You cannot talk to the ISS on amateur radio frequencies

T8C03

What popular operating activity involves contacting as many stations as possible during a specified period of time?

- A. Contesting
- B. Net operations
- C. Public service events
- D. Simulated emergency exercises

T8D09

What code is used when sending CW in the amateur bands?

- A. Baudot

- B. Hamming
- C. International Morse
- D. Gray

T0C02

Which of the following frequencies has the lowest Maximum Permissible Exposure limit?

- A. 3.5 MHz
- B. 50 MHz
- C. 440 MHz
- D. 1296 MHz

0.9 Section 9 2 questions

T9A04

What is a disadvantage of the "rubber duck" antenna supplied with most handheld radio transceivers?

- A. It does not transmit or receive as effectively as a full-sized antenna
- B. It transmits a circularly polarized signal
- C. If the rubber end cap is lost it will unravel very quickly
- D. All of these choices are correct

T9B06 Which of the following connectors is most suitable for frequencies above 400 MHz?

- A. A UHF (PL-259/SO-239) connector
- B. A Type N connector
- C. An RS-213 connector
- D. A DB-23 connector

0.10 Section 0 3 questions

T0A02

How does current flowing through the body cause a health hazard?

- A. By heating tissue
- B. It disrupts the electrical functions of cells
- C. It causes involuntary muscle contractions
- D. All of these choices are correct

T0B04

Which of the following is an important safety precaution to observe when putting up an antenna tower?

- A. Wear a ground strap connected to your wrist at all times
- B. Insulate the base of the tower to avoid lightning strikes
- C. Look for and stay clear of any overhead electrical wires
- D. All of these choices are correct

0.11 Answers

D, B, B, A, D, C; B, C, D; B, C, D; D, A; D, B, A, B; C, B, C, B; C, C, C, C; C, B, A, C; A, B; D, C, B.