### Results for sample technician2014 test paper

Your answers are marked like this:

#### A. You got this question right, this is your correct answer.

- x A. You got this question wrong, this is your incorrect answer.
- ✓ A. You got this question wrong, this is the correct answer.
- ✓ A. You didnt answer this question but this would be the correct answer.

### **Subelement T0**

#### 1: T0A05

#### Why is it unwise to install a 20-ampere fuse in the place of a 5-ampere fuse?

- A. The larger fuse would be likely to blow because it is rated for higher current
- B. The power supply ripple would greatly increase
- C. Excessive current could cause a fire
  - D. All of these choices are correct

#### 2: T0B10

## Which of the following is true concerning grounding conductors used for lightning protection?

- A. Only non-insulated wire must be used
- B. Wires must be carefully routed with precise right-angle bends

#### C. Sharp bends must be avoided

D. Common grounds must be avoided

#### 3: T0C08

# Which of the following actions might amateur operators take to prevent exposure to RF radiation in excess of FCC-supplied limits?

#### A. Relocate antennas

- B. Relocate the transmitter
- C. Increase the duty cycle
- D. All of these choices are correct

### Subelement T1

#### *4: T1A03* Which part of the FCC regulations contains the rules governing the Amateur Radio

#### Service?

D. Part 97	
C. Part 90	
B. Part 95	
A. Part 73	

#### 5: T1B06

Which 23 cm frequency is authorized to a Technician Class licensee? A. 2315 MHz

- **B**. 1296 MHz
  - C. 3390 MHz
  - D. 146.52 MHz

#### 6: T1C10

# How soon after passing the examination for your first amateur radio license may you operate a transmitter on an amateur service frequency?

- A. Immediately
- B. 30 days after the test date

## C. As soon as your operator/station license grant appears in the FCC s license database

D. You must wait until you receive your license in the mail from the FCC

#### 7: T1D05

## When may amateur radio operators use their stations to notify other amateurs of the availability of equipment for sale or trade?

## A. When the equipment is normally used in an amateur station and such activity is not conducted on a regular basis

- B. When the asking price is \$100.00 or less
- C. When the asking price is less than its appraised value
- D. When the equipment is not the personal property of either the station licensee or the control operator or their close relatives

#### 8: T1E02

## Who may a station licensee designate to be the control operator of an amateur station?

- A. Any U.S. citizen or registered alien
- B. Any family member of the station licensee
- C. Any 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

#### 9: T1F02

When using tactical identifiers such as Race Headquarters during a community service net operation, 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. At the end of each communication and every ten minutes during a communication

D. At the end of every transmission

### Subelement T2

#### 10: T2A09

# What brief statement is often transmitted in place of CQ to indicate that you are listening on a repeater?

- A. The words Hello test followed by your call sign
- B. Your call sign
  - C. The repeater call sign followed by your call sign
  - D. The letters QSY followed by your call sign

#### 11: T2B10

## Which Q signal indicates that you are receiving interference from other stations?

- B. QRN
- C. QTH
- D. QSB
- D. Q0D

#### 12: T2C04

#### What do RACES and ARES have in common?

- A. They represent the two largest ham clubs in the United States
- B. Both organizations broadcast road and weather information

**x**C. Neither may handle emergency traffic supporting public service agencies

D. Both organizations may provide communications during emergencies

### **Subelement T3**

13: T3A07

# What type of wave carries radio signals between transmitting and receiving stations?

#### A. Electromagnetic

- B. Electrostatic
- C. Surface acoustic
- D. Magnetostrictive

#### 14: T3B05

#### How does the wavelength of a radio wave relate to its frequency?

A. The wavelength gets longer as the frequency increases

#### B. The wavelength gets shorter as the frequency increases

- C. There is no relationship between wavelength and frequency
- D. The wavelength depends on the bandwidth of the signal

#### 15: T3C09

#### What is generally the best time for long-distance 10 meter band propagation via

#### the F layer?

A. From dawn to shortly after sunset during periods of high sunspot activity

- B. From shortly after sunset to dawn during periods of high sunspot activity
- C. From dawn to shortly after sunset during periods of low sunspot activity
- D. From shortly after sunset to dawn during periods of low sunspot activity

### **Subelement T4**

#### 16: T4A07

How is a computer s sound card used when conducting digital communications using a computer?

- A. The sound card communicates between the computer CPU and the video display
- B. The sound card records the audio frequency for video display

## C. The sound card provides audio to the microphone input and converts received audio to digital form

D. All of these choices are correct

#### 17: 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

### **Subelement T5**

#### 18: T5A09

#### What is the name for a current that reverses direction on a regular basis?

#### A. Alternating current

- B. Direct current
- C. Circular current
- D. Vertical current

#### 19: T5B05

#### Which of the following is equivalent to 500 milliwatts?

A. 0.02 watts

#### ✓ B. 0.5 watts

- C. 5 watts
- D. 50 watts

#### 20: T5C09

How much power is being used in a circuit when the applied voltage is 13.8 volts DC and the current is 10 amperes?

✓ A. 138 watts

- B. 0.7 watts
- C. 23.8 watts
- D. 3.8 watts

#### 21: T5D06

What is the resistance of a circuit that draws 4 amperes from a 12-volt source?

- 🗸 A. 3 ohms
  - B. 16 ohms
  - C. 48 ohms
  - D. 8 Ohms

### Subelement T6

#### 22: T6A04

#### What electrical component stores energy in an electric field?

- A. Resistor
- B. Capacitor
  - C. Inductor
  - D. Diode

#### 23: T6B05

#### Which of the following electronic components can amplify signals?

#### A. Transistor

- B. Variable resistor
- C. Electrolytic capacitor
- D. Multi-cell battery

#### 24: T6C02

#### What is component 1 in figure T1?

#### A. Resistor

- B. Transistor
- C. Battery
- D. Connector

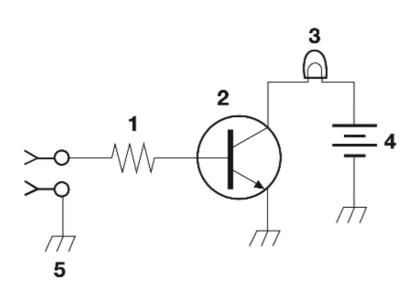


Figure T-1

#### 25: T6D01

Which of the following devices or circuits changes an alternating current into a varying direct current signal?

- A. Transformer
- B. Rectifier
  - C. Amplifier
  - D. Reflector

### Subelement T7

#### 26: T7A10

#### What device increases the low-power output from a handheld transceiver?

A. A voltage divider

#### B. An RF power amplifier

- C. An impedance network
- D. All of these choices are correct

#### 27: T7B07

# Which of the following may be useful in correcting a radio frequency interference problem?

A. Snap-on ferrite chokes

B. Low-pass and high-pass filters

xC. Band-reject and band-pass filters

D. All of these choices are correct

#### 28: T7C12

#### Which of the following is a common use of coaxial cable?

A. Carrying dc power from a vehicle battery to a mobile radio

#### B. Carrying RF signals between a radio and antenna

- C. Securing masts, tubing, and other cylindrical objects on towers
- D. Connecting data signals from a TNC to a computer

#### 29: T7D12

## Which of the following precautions should be taken when measuring high voltages with a voltmeter?

A. Ensure that the voltmeter has very low impedance

# B. Ensure that the voltmeter and leads are rated for use at the voltages to be measured

- C. Ensure that the circuit is grounded through the voltmeter
- D. Ensure that the voltmeter is set to the correct frequency

### **Subelement T8**

#### 30: T8A01

#### Which of the following is a form of amplitude modulation?

- A. Spread-spectrum
- B. Packet radio

#### C. Single sideband

D. Phase shift keying

#### 31: T8B05

#### What is a satellite beacon?

- A. The primary transmit antenna on the satellite
- B. An indicator light that that shows where to point your antenna
- C. A reflective surface on the satellite

## D. A transmission from a space station that contains information about a satellite

#### 32: 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

#### 33: T8D10

#### Which of the following can be used to transmit CW in the amateur bands?

- A. Straight Key
- B. Electronic Keyer
- C. Computer Keyboard
- D. All of these choices are correct

### Subelement T9

#### 34: T9A05

# 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

#### 35: T9B03

## Why is coaxial cable used more often than any other feed line for amateur radio antenna systems?

#### A. It is easy to use and requires few special installation considerations

- B. It has less loss than any other type of feed line
- C. It can handle more power than any other type of feed line
- D. It is less expensive than any other types of feed line

#### Results: You scored 33 correct answers and 2 incorrect answers from a total of 35.

#### You would have passed the exam! Congratulations!



#### Click here to take another test.

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