Results for sample technician 2014 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: T0A02

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

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

2: T0B03

Under what circumstances is it safe to climb a tower without a helper or observer?

- A. When no electrical work is being performed
- B. When no mechanical work is being performed
- C. When the work being done is not more than 20 feet above the ground
- D. Never

3: T0C01

What type of radiation are VHF and UHF radio signals?

- A. Gamma radiation
- B. Ionizing radiation
- C. Alpha radiation
- D. Non-ionizing radiation

Subelement T1

4: T1A11

When is willful interference to other amateur radio stations permitted?

A. Only if the station being interfered with is expressing extreme religious or political views

B. At no time

2016/09/14 14:11

- C. Only during a contest
- D. At any time, amateurs are not protected from willful interference

5: T1B11

What emission modes are permitted in the mode-restricted sub-bands at 50.0 to 50.1 MHz and 144.0 to 144.1 MHz?

A. CW only

- B. CW and RTTY
- C. SSB only
- D. CW and SSB

6: T1C09

What is the grace period following the expiration of an amateur license within which the license may be renewed?

- ✓ A. Two years
 - B. Three years
 - C. Five years
- xD. Ten years

7: T1D02

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

8: T1E05

What is an amateur station control point?

- A. The location of the station s transmitting antenna
- B. The location of the station transmitting apparatus

C. The location at which the control operator function is performed

D. The mailing address of the station licensee

9: T1F08

Which indicator is required by the FCC to be transmitted after a station call sign?

- A. /M when operating mobile
- B. /R when operating a repeater
- C. / followed the FCC Region number when operating out of the region in which the license was issued
- D. /KT, /AE or /AG when using new license privileges earned by CSCE while waiting for an upgrade to a previously issued license to appear in the FCC license database

Subelement T2

10: T2A10

What is a band plan, beyond the privileges established by the FCC?

- A. A voluntary guideline for using different modes or activities within an amateur band
 - B. A mandated list of operating schedules
 - C. A list of scheduled net frequencies
 - D. A plan devised by a club to indicate frequency band usage

11: T2B08

Which of the following applies when two stations transmitting on the same frequency interfere with each other?

- ✓ A. Common courtesy should prevail, but no one has absolute right to an amateur frequency
 - B. Whoever has the strongest signal has priority on the frequency
 - C. Whoever has been on the frequency the longest has priority on the frequency
 - D. The station which has the weakest signal has priority on the frequency

12: T2C05

Which of the following describes the Radio Amateur Civil Emergency Service (RACES)?

- A. A radio service using amateur frequencies for emergency management or civil defense communications
- xB. A radio service using amateur stations for emergency management or civil defense communications
- C. An emergency service using amateur operators certified by a civil defense organization as being enrolled in that organization
- D. All of these choices are correct

Subelement T3

13: T3A05

When using a directional antenna, how might your station be able to access a distant repeater if buildings or obstructions are blocking the direct line of sight path?

- A. Change from vertical to horizontal polarization
- B. Try to find a path that reflects signals to the repeater
 - C. Try the long path
 - D. Increase the antenna SWR

14: T3B01

What is the name for the distance a radio wave travels during one complete cycle?

- A. Wave speed
- B. Waveform
- C. Wavelength
 - D. Wave spread

15: T3C11

Why do VHF and UHF radio signals usually travel somewhat farther than the visual line of sight distance between two stations?

3/9 2016/09/14 14:11

- A. Radio signals move somewhat faster than the speed of light
- B. Radio waves are not blocked by dust particles
- C. The Earth seems less curved to radio waves than to light
 - D. Radio waves are blocked by dust particles

Subelement T4

16: T4A06

Which of the following would be connected between a transceiver and computer in a packet radio station?

- A. Transmatch
- B. Mixer
- C. Terminal node controller
 - D. Antenna

17: T4B08

What is the advantage of having multiple receive bandwidth choices on a multimode transceiver?

- A. Permits monitoring several modes at once
- ✓ B. Permits noise or interference reduction by selecting a bandwidth matching the mode
- xC. Increases the number of frequencies that can be stored in memory
 - D. Increases the amount of offset between receive and transmit frequencies

Subelement T5

18: T5A02

Electrical power is measured in which of the following units?

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

19: T5B06

If an ammeter calibrated in amperes is used to measure a 3000-milliampere current, what reading would it show?

- A. 0.003 amperes
- B. 0.3 amperes
- C. 3 amperes
 - D. 3,000,000 amperes

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: T5D12

What is the voltage across a 10-ohm resistor if a current of 2 amperes flows through it?

- A. 8 volts
- B. 0.2 volts
- C. 12 volts
- D. 20 volts

Subelement T6

22: T6A01

What electrical component is used to oppose the flow of current in a DC circuit?

xA. Inductor

- **✔** B. Resistor
 - C. Voltmeter
 - D. Transformer

23: T6B06

How is the cathode lead of a semiconductor diode usually identified?

- A. With the word cathode
- ✓ B. With a stripe
 - C. With the letter C
 - D. All of these choices are correct

24: T6C07

What is component 8 in figure T2?

- A. Resistor
- B. Inductor
- C. Regulator IC
- D. Light emitting diode

5 / 9 2016/09/14 14:11

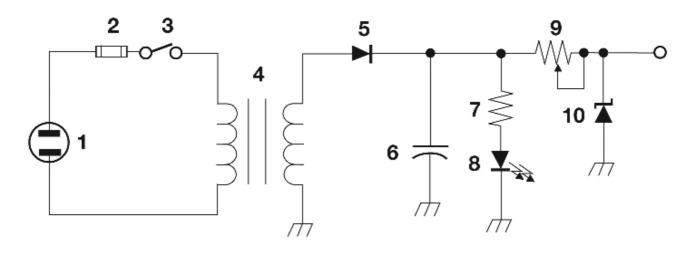


Figure T-2

25: T6D10

What is the function of component 2 in Figure T1?

- A. Give off light when current flows through it
- B. Supply electrical energy
- C. Control the flow of current
 - D. Convert electrical energy into radio waves

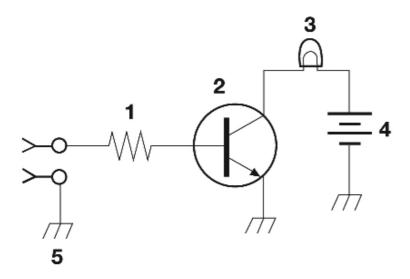


Figure T-1

Subelement T7

26: T7A07

What is meant by term PTT?

A. Pre-transmission tuning to reduce transmitter harmonic emission

6 / 9 2016/09/14 14:11

- B. Precise tone transmissions used to limit repeater access to only certain signals
- C. A primary transformer tuner use to match antennas
- D. The push to talk function which switches between receive and transmit

27: T7B04

Which of the following is a way to reduce or eliminate interference by an amateur transmitter to a nearby telephone?

- A. Put a filter on the amateur transmitter
- B. Reduce the microphone gain
- C. Reduce the SWR on the transmitter transmission line
- D. Put a RF filter on the telephone

28: T7C06

What does an SWR reading of 4:1 indicate?

- A. Loss of -4dB
- B. Good impedance match
- C. Gain of +4dB
- D. Impedance mismatch

29: T7D10

What is probably happening when an ohmmeter, connected across an unpowered circuit, initially indicates a low resistance and then shows increasing resistance with time?

- A. The ohmmeter is defective
- B. The circuit contains a large capacitor
 - C. The circuit contains a large inductor
 - D. The circuit is a relaxation oscillator

Subelement T8

30: T8A06

Which sideband is normally used for 10 meter HF, VHF and UHF single-sideband communications?

A. Upper sideband

- B. Lower sideband
- C. Suppressed sideband
- D. Inverted sideband

31: T8B09

What causes spin fading when referring to satellite signals?

- A. Circular polarized noise interference radiated from the sun
- B. Rotation of the satellite and its antennas
 - C. Doppler shift of the received signal
 - D. Interfering signals within the satellite uplink band

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: T8D09

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

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

Subelement T9

34: T9A02

Which of the following is true regarding vertical antennas?

- A. The magnetic field is perpendicular to the Earth
- B. The electric field is perpendicular to the Earth
 - C. The phase is inverted
 - D. The phase is reversed

35: T9B05

What generally happens as the frequency of a signal passing through coaxial cable is increased?

- A. The apparent SWR increases
- B. The reflected power increases
- C. The characteristic impedance increases
- D. The loss increases

Results:

You scored 30 correct answers and 5 incorrect answers from a total of 35.

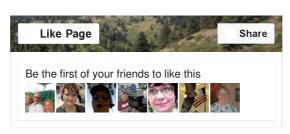
You would have passed the exam! Congratulations!

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9 / 9