

Results for sample technician2014 test paper

Your answers are marked like this:

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

✗ *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: T0A07

Which of these precautions should be taken when installing devices for lightning protection in a coaxial cable feed line?

- A. Include a parallel bypass switch for each protector so that it can be switched out of the circuit when running high power
- B. Include a series switch in the ground line of each protector to prevent RF overload from inadvertently damaging the protector
- C. Keep the ground wires from each protector separate and connected to station ground

✓ **D. Ground all of the protectors to a common plate which is in turn connected to an external ground**

2: T0B12

Which of the following is good practice when installing ground wires on a tower for lightning protection?

- A. Put a loop in the ground connection to prevent water damage to the ground system
- B. Make sure that all bends in the ground wires are clean, right angle bends

✓ **C. Ensure that connections are short and direct**

- D. All of these choices are correct

3: T0C02

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

- A. 3.5 MHz
- ✓ **B. 50 MHz**
- C. 440 MHz

✗ **D. 1296 MHz**

Subelement T1

4: T1A03

Which part of the FCC regulations contains the rules governing the Amateur Radio Service?

- A. Part 73
- B. Part 95
- C. Part 90

✓ **D. Part 97**

5: T1B04

Which amateur band are you using when your station is transmitting on 146.52 MHz?

✓ **A. 2 meter band**

- B. 20 meter band
- C. 14 meter band
- D. 6 meter band

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: T1D06

What, if any, are the restrictions concerning transmission of language that may be considered indecent or obscene?

A. The FCC maintains a list of words that are not permitted to be used on amateur frequencies

✓ **B. Any such language is prohibited**

C. The ITU maintains a list of words that are not permitted to be used on amateur frequencies

x **D. There is no such prohibition**

8: T1E12

When, under normal circumstances, may a Technician Class licensee be the control operator of a station operating in an exclusive Extra Class operator segment of the amateur bands?

✓ **A. At no time**

- B. When operating a special event station
- C. As part of a multi-operator contest team
- D. When using a club station whose trustee is an Extra Class operator licensee

9: T1F11

To which foreign stations do the FCC rules authorize the transmission of non-emergency third party communications?

☒ **A. Any station whose government permits such communications**

- B. Those in ITU Region 2 only
- C. Those in ITU Regions 2 and 3 only
- D. Those in ITU Region 3 only

Subelement T2

10: T2A01

What is the most common repeater frequency offset in the 2 meter band?

A. Plus 500 kHz

☒ **B. Plus or minus 600 kHz**

- C. Minus 500 kHz
- D. Only plus 600 kHz

11: T2B02

What is the term used to describe the use of a sub-audible tone transmitted with normal voice audio to open the squelch of a receiver?

☐ **A. Carrier squelch**

- B. Tone burst
- C. DTMF
- ☒ **D. CTCSS**

12: T2C08

Which of the following is a characteristic of good emergency traffic handling?

☒ **A. Passing messages exactly as received**

- B. Making decisions as to whether or not messages should be relayed or delivered
- C. Communicating messages to the news media for broadcast outside the disaster area
- D. All of these choices are correct

Subelement T3

13: T3A01

What should you do if another operator reports that your station's 2 meter signals were strong just a moment ago, but now they are weak or distorted?

- A. Change the batteries in your radio to a different type
- B. Turn on the CTCSS tone
- C. Ask the other operator to adjust his squelch control

☒ **D. Try moving a few feet or changing the direction of your antenna if possible, as reflections may be causing multi-path distortion**

14: T3B08

What are the frequency limits of the VHF spectrum?

- A. 30 to 300 kHz

✓ **B. 30 to 300 MHz**

- C. 300 to 3000 kHz
- D. 300 to 3000 MHz

15: T3C01

Why are direct (not via a repeater) UHF signals rarely heard from stations outside your local coverage area?

- A. They are too weak to go very far
- B. FCC regulations prohibit them from going more than 50 miles

✓ **C. UHF signals are usually not reflected by the ionosphere**

- D. They collide with trees and shrubbery and fade out

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: T4B10

Which of the following is an appropriate receive filter bandwidth to select in order to minimize noise and interference for CW reception?

✓ **A. 500 Hz**

- B. 1000 Hz
- C. 2400 Hz
- D. 5000 Hz

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: T5B12

Which of the following frequencies is equal to 28,400 kHz?

✓ **A. 28.400 MHz**

- B. 2.800 MHz
- C. 284.00 MHz

D. 28.400 kHz

20: T5C01

What is the ability to store energy in an electric field called?

- A. Inductance
- B. Resistance
- C. Tolerance

✓ **D. Capacitance**

21: T5D07

What is the current flow in a circuit with an applied voltage of 120 volts and a resistance of 80 ohms?

- A. 9600 amperes
- B. 200 amperes
- C. 0.667 amperes

✓ **D. 1.5 amperes**

Subelement T6

22: T6A10

Which of the following battery types is rechargeable?

✗ **A. Nickel-metal hydride**

- B. Lithium-ion
- C. Lead-acid gel-cell

✓ **D. All of these choices are correct**

23: T6B10

What are the three electrodes of a PNP or NPN transistor?

✓ **A. Emitter, base, and collector**

- B. Source, gate, and drain
- C. Cathode, grid, and plate
- D. Cathode, drift cavity, and collector

24: T6C12

What do the symbols on an electrical circuit schematic diagram represent?

✓ **A. Electrical components**

- B. Logic states
- C. Digital codes
- D. Traffic nodes

25: T6D05

What type of circuit controls the amount of voltage from a power supply?

✓ **A. Regulator**

- B. Oscillator
- C. Filter
- D. Phase inverter

Subelement T7

26: T7A08

Which of the following describes combining speech with an RF carrier signal?-

- A. Impedance matching
- B. Oscillation
- ✓ C. Modulation
- D. Low-pass filtering

27: T7B10

What might be the problem if you receive a report that your audio signal through the repeater is distorted or unintelligible?

- A. Your transmitter may be slightly off frequency
- B. Your batteries may be running low
- C. You could be in a bad location
- ✓ D. All of these choices are correct

28: T7C01

What is the primary purpose of a dummy load?

- ✓ A. To prevent the radiation of signals when making tests
- B. To prevent over-modulation of your transmitter
- C. To improve the radiation from your antenna
- D. To improve the signal to noise ratio of your receiver

29: T7D05

What instrument is used to measure resistance?

- A. An oscilloscope
- B. A spectrum analyzer
- C. A noise bridge
- ✓ D. An ohmmeter

Subelement T8

30: T8A02

What type of modulation is most commonly used for VHF packet radio transmissions?

- ✓ A. FM
- B. SSB
- C. AM
- D. Spread Spectrum

31: T8B11

What is a commonly used method of sending signals to and from a digital satellite?

- A. USB AFSK
- B. PSK31

☒ **C. FM Packet**

D. WSJT

32: T8C08

What is required in place of on-air station identification when sending signals to a radio control model using amateur frequencies?

- A. Voice identification must be transmitted every 10 minutes
- B. Morse code ID must be sent once per hour

☒ **C. A label indicating the licensee s name, call sign and address must be affixed to the transmitter**

D. A flag must be affixed to the transmitter antenna with the station call sign in 1 inch high letters or larger

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: T9A11

What is meant by 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 when compared to a reference antenna**

D. The increase in impedance on receive or transmit compared to a reference antenna

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

You would have passed the exam! Congratulations!

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1,881 likes

