Results for sample general2015 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 G0

1: G0A01

What is one way that RF energy can affect human body tissue?

- A. It heats body tissue
 - B. It causes radiation poisoning
 - C. It causes the blood count to reach a dangerously low level
 - D. It cools body tissue

2: G0B07

Which of these choices should be observed when climbing a tower using a safety belt or harness?

- A. Never lean back and rely on the belt alone to support your weight
- ✓ B. Confirm that the belt is rated for the weight of the climber and that it is within its
 allowable service life
 - C. Ensure that all heavy tools are securely fastened to the belt D-ring
 - D. All of these choices are correct

Subelement G1

3: G1A13

What is the appropriate action if, when operating on either the 30-meter or 60-meter bands, a station in the primary service interferes with your contact?

- A. Notify the FCCs regional Engineer in Charge of the interference
- B. Increase your transmitter's power to overcome the interference
- C. Attempt to contact the station and request that it stop the interference
- D. Move to a clear frequency or stop transmitting

4: G1B02

With which of the following conditions must beacon stations comply?

- A. A beacon station may not use automatic control
- xB. The frequency must be coordinated with the National Beacon Organization
 - C. The frequency must be posted on the Internet or published in a national periodical
- **✔** D. There must be no more than one beacon signal transmitting in the same band from the same station location

5: G1C06

Which of the following is a limitation on transmitter power on the 1.8 MHz band?

- A. 200 watts PEP output
- B. 1000 watts PEP output
- C. 1200 watts PEP output
- ✓ D. 1500 watts PEP output

D. 1300 Watts FEF output

6: G1D06

When must you add the special identifier "AG" after your call sign if you are a Technician Class licensee and have a CSCE for General Class operator privileges, but the FCC has not yet posted your upgrade on its website?

- ✓ A. Whenever you operate using General Class frequency privileges
 - B. Whenever you operate on any amateur frequency
 - C. Whenever you operate using Technician frequency privileges
- xD. A special identifier is not required as long as your General Class license application has been filed with the FCC

7: G1E03

What is required to conduct communications with a digital station operating under automatic control outside the automatic control band segments?

- ✓ A. The station initiating the contact must be under local or remote control
- B. The interrogating transmission must be made by another automatically controlled station
- xC. No third party traffic maybe be transmitted
 - D. The control operator of the interrogating station must hold an Extra Class license

Subelement G2

8: G2A05

Which mode of voice communication is most commonly used on the HF amateur bands?

- A. Frequency modulation
- B. Double sideband
- C. Single sideband
 - D. Phase modulation

9: G2B04

When selecting a CW transmitting frequency, what minimum separation should be used to minimize interference to stations on adjacent frequencies?

- A. 5 to 50 Hz
- ✓ B. 150 to 500 Hz
 - C. 1 to 3 kHz
 - D. 3 to 6 kHz

10: G2C04

What does the Q signal "QRL?" mean?

- A. "Will you keep the frequency clear?"
- B. "Are you operating full break-in" or "Can you operate full break-in?"
- C. "Are you listening only for a specific station?"
- D. "Are you busy?", or "Is this frequency in use?"

11: G2D11

Which HF antenna would be the best to use for minimizing interference?

- A. A quarter-wave vertical antenna
- B. An isotropic antenna
- C. A directional antenna
 - D. An omnidirectional antenna

12: G2E07

What segment of the 80-meter band is most commonly used for digital transmissions?

✓ A. 3570 – 3600 kHz

xB. 3500 – 3525 kHz

C. 3700 – 3750 kHz

D. 3775 – 3825 kHz

Subelement G3

13: G3A03

Approximately how long does it take the increased ultraviolet and X-ray radiation from solar flares to affect radio propagation on the Earth?

A. 28 days

xB. 1 to 2 hours

C. 8 minutes

D. 20 to 40 hours

14: G3B03

Which of the following applies when selecting a frequency for lowest attenuation when transmitting on HF?

A. Select a frequency just below the MUF

- B. Select a frequency just above the LUF
- C. Select a frequency just below the critical frequency
- D. Select a frequency just above the critical frequency

15: G3C08

Why are HF scatter signals in the skip zone usually weak?

- ✓ A. Only a small part of the signal energy is scattered into the skip zone
 - B. Signals are scattered from the magnetosphere which is not a good reflector
 - C. Propagation is through ground waves which absorb most of the signal energy
 - D. Propagations is through ducts in F region which absorb most of the energy

Subelement G4

16: G4A10

What is the purpose of an electronic keyer?

- A. Automatic transmit/receive switching
- **▶** B. Automatic generation of strings of dots and dashes for CW operation
 - C. VOX operation
 - D. Computer interface for PSK and RTTY operation

17: G4B04

What signal source is connected to the vertical input of an oscilloscope when checking the RF envelope pattern of a transmitted signal?

- A. The local oscillator of the transmitter
- B. An external RF oscillator
- C. The transmitter balanced mixer output
- D. The attenuated RF output of the transmitter

18: G4C02

Which of the following could be a cause of interference covering a wide range of frequencies?

- A. Not using a balun or line isolator to feed balanced antennas
- B. Lack of rectification of the transmitter's signal in power conductors
- C. Arcing at a poor electrical connection
 - D. Using a balun to feed an unbalanced antenna

19: G4D11

How close to the upper edge of the 20-meter General Class band should your displayed carrier frequency be when using 3 kHz wide USB?

- A. At least 3 kHz above the edge of the band
- B. At least 3 kHz below the edge of the band
 - C. Your displayed carrier frequency may be set at the edge of the band
 - D. At least 1 kHz below the edge of the segment

20: G4E02

What is the purpose of a corona ball on a HF mobile antenna?

- A. To narrow the operating bandwidth of the antenna
- B. To increase the "Q" of the antenna
- C. To reduce the chance of damage if the antenna should strike an object
- D. To reduce high voltage discharge from the tip of the antenna

Subelement G5

21: G5A09

What unit is used to measure reactance?

- A. Farad
- B. Ohm
 - C. Ampere
 - D. Siemens

22: G5B06

What is the output PEP from a transmitter if an oscilloscope measures 200 volts peak-to-peak across a 50 ohm dummy load connected to the transmitter output?

- A. 1.4 watts
- B. 100 watts
 - C. 353.5 watts
 - D. 400 watts

23: G5C07

What is the turns ratio of a transformer used to match an audio amplifier having 600 ohm output impedance to a speaker having 4 ohm impedance?

- A. 12.2 to 1
 - B. 24.4 to 1
 - C. 150 to 1
 - D. 300 to 1

Subelement G6

24: G6A10

Which element of a triode vacuum tube is used to regulate the flow of electrons between cathode and plate?

- A. Control grid
 - B. Heater
 - C. Screen Grid

D. Trigger electrode

25: G6B18

What is a type SMA connector?

- A. A large bayonet connector usable at power levels in excess of 1 KW
- B. A small threaded connector suitable for signals up to several GHz
 - C. A connector designed for serial multiple access signals
 - D. A type of push-on connector intended for high voltage applications

Subelement G7

26: G7A12

Which symbol in Figure G7-1 represents a multiple-winding transformer?

- A. Symbol 4
- B. Symbol 7
- C. Symbol 6
 - D. Symbol 1

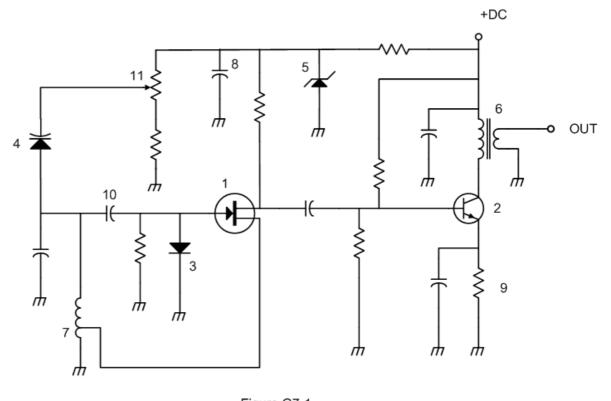


Figure G7-1

27: G7B02

Which of the following is an advantage of using the binary system when processing digital signals?

✓ A. Binary "ones" and "zeros" are easy to represent by an "on" or "off" state

- B. The binary number system is most accurate
- C. Binary numbers are more compatible with analog circuitry
- D. All of these choices are correct

28: G7C02

Which circuit is used to combine signals from the carrier oscillator and speech amplifier then send the result to the filter in some single sideband phone transmitters?

- A. Discriminator
- B. Detector
- C. IF amplifier
- D. Balanced modulator

Subelement G8

29: G8A11

What is the modulation envelope of an AM signal?

- ✓ A. The waveform created by connecting the peak values of the modulated signal.
 - B. The carrier frequency that contains the signal
 - C. Spurious signals that envelop nearby frequencies
 - D. The bandwidth of the modulated signal

30: G8B07

What is the frequency deviation for a 12.21 MHz reactance modulated oscillator in a 5 kHz deviation, 146.52 MHz FM phone transmitter?

A. 101.75 Hz

✓ B. 416.7 Hz

C. 5 kHz

D. 60 kHz

31: G8C11

How are the two separate frequencies of a Frequency Shift Keyed (FSK) signal identified?

- A. Dot and Dash
- B. On and Off

xC. High and Low

✔ D. Mark and Space

Subelement G9

32: G9A02

What are the typical characteristic impedances of coaxial cables used for antenna feed lines at amateur stations?

A. 25 and 30 ohms

B. 50 and 75 ohms

C. 80 and 100 ohms

D. 500 and 750 ohms

33: G9B03

What happens to the feed point impedance of a ground plane antenna when its radials are changed from horizontal to sloping downward?

A. It decreases

- B. It increases
 - C. It stays the same
 - D. It reaches a maximum at an angle of 45 degrees

34: G9C14

How does the forward gain of a two-element quad antenna compare to the forward

gain of a three-element Yagi antenna?

- A. About 2/3 as much
- B. About the same
 - C. About 1.5 times as much
 - D. About twice as much

35: G9D07

Which of the following describes a log periodic antenna?

- ✓ A. Length and spacing of the elements increase logarithmically from one end of the boom to the other
 - B. Impedance varies periodically as a function of frequency
 - C. Gain varies logarithmically as a function of frequency
 - D. SWR varies periodically as a function of boom length

Results:

You scored 29 correct answers and 6 incorrect answers from a total of 35.

You would have passed the exam! Congratulations!

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