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: G0A12

What precaution should you take whenever you make adjustments or repairs to an antenna?

A. Ensure that you and the antenna structure are grounded

- B. Turn off the transmitter and disconnect the feed line
 - C. Wear a radiation badge
 - D. All of these choices are correct

2: G0B15

Which of the following is true of an emergency generator installation?

- A. The generator should be located in a well-ventilated area
 - B. The generator must be insulated from ground
 - C. Fuel should be stored near the generator for rapid refueling in case of an emergency
 - D. All of these choices are correct

Subelement G1

3: G1A06

Which of the following frequencies is within the General Class portion of the 75-meter phone band?

- A. 1875 kHz
- B. 3750 kHz
- ✔ C. 3900 kHz
 - D. 4005 kHz

4: G1B02

With which of the following conditions must beacon stations comply?

- A. A beacon station may not use automatic control
- B. 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: G1C09

What is the maximum symbol rate permitted for RTTY or data emission transmitted on the 1.25-meter and 70-centimeter bands?

1 / 7

A. 56 kilobaud

- B. 19.6 kilobaud
- C. 1200 baud
- D. 300 baud

6: G1D09

How long is a Certificate of Successful Completion of Examination (CSCE) valid for exam element credit?

- A. 30 days
- B. 180 days
- C. 365 days
 - D. For as long as your current license is valid

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

C. No third party traffic maybe be transmitted

D. The control operator of the interrogating station must hold an Extra Class license

Subelement G2

8: G2A02

Which of the following modes is most commonly used for voice communications on the 160-meter, 75-meter, and 40-meter bands?

A. Upper sideband

- B. Lower sideband
 - C. Vestigial sideband
 - D. Double sideband

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: G2C07

When sending CW, what does a "C" mean when added to the RST report?

A. Chirpy or unstable signal

- B. Report was read from an S meter rather than estimated
- C. 100 percent copy
- D. Key clicks

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

In what segment of the 20-meter band are most PSK31 operations commonly found?

- A. At the bottom of the slow-scan TV segment, near 14.230 MHz
- B. At the top of the SSB phone segment, near 14.325 MHz
- C. In the middle of the CW segment, near 14.100 MHz

D. Below the RTTY segment, near 14.070 MHz

Subelement G3

13: G3A09

What effect does a high sunspot number have on radio communications?

A. High-frequency radio signals become weak and distorted

B. Frequencies above 300 MHz become usable for long-distance communication

C. Long-distance communication in the upper HF and lower VHF range is enhanced

D. Microwave communications become unstable

14: G3B11

What happens to HF propagation when the LUF exceeds the MUF?

A. No HF radio frequency will support ordinary sky-wave communications over the path

- B. HF communications over the path are enhanced
- C. Double hop propagation along the path is more common
- D. Propagation over the path on all HF frequencies is enhanced

15: G3C01

Which ionospheric layer is closest to the surface of the Earth?

A. The D layer

- B. The E layer
- C. The F1 layer
- D. The F2 layer

Subelement G4

16: G4A12

Which of the following is a common use for the dual VFO feature on a transceiver?

A. To allow transmitting on two frequencies at once

- B. To permit full duplex operation, that is transmitting and receiving at the same time
- C. To permit monitoring of two different frequencies

D. To facilitate computer interface

17: G4B05

Why is high input impedance desirable for a voltmeter?

A. It improves the frequency response

B. It decreases battery consumption in the meter

xC. It improves the resolution of the readings

D. It decreases the loading on circuits being measured

18: G4C12

Which of the following is an advantage of a receiver DSP IF filter as compared to an analog filter?

- A. A wide range of filter bandwidths and shapes can be created
 - B. Fewer digital components are required
 - C. Mixing products are greatly reduced

D. The DSP filter is much more effective at VHF frequencies

19: G4D10

How close to the lower edge of the 40-meter General Class phone segment should your displayed carrier frequency be when using 3 kHz wide LSB?

A. At least 3 kHz above the edge of the segment

B. At least 3 kHz below the edge of the segment

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

20: G4E11

Which of the following is a disadvantage of using wind as the primary source of power for an emergency station?

A. The conversion efficiency from mechanical energy to electrical energy is less than 2 percent

B. The voltage and current ratings of such systems are not compatible with amateur equipment

C. A large energy storage system is needed to supply power when the wind is not blowing

D. All of these choices are correct

Subelement G5

21: G5A04

Which of the following causes opposition to the flow of alternating current in a capacitor?

- A. Conductance
- B. Reluctance

C. Reactance

D. Admittance

22: G5B03

How many watts of electrical power are used if 400 VDC is supplied to an 800 ohm load?

- A. 0.5 watts
- B. 200 watts
 - C. 400 watts
 - D. 3200 watts

23: G5C15

What is the total resistance of a 10 ohm, a 20 ohm, and a 50 ohm resistor connected in parallel?

- A. 5.9 ohms
 - B. 0.17 ohms
 - C. 10000 ohms
 - D. 80 ohms

Subelement G6

24: G6A05

What is the approximate junction threshold voltage of a conventional silicon diode? A. 0.1 volt

B. 0.3 volts

C. 0.7 volts

D. 1.0 volts

25: G6B04

What is meant by the term ROM?

A. Resistor Operated Memory

B. Read Only Memory

- C. Random Operational Memory
- D. Resistant to Overload Memory

Subelement G7

26: G7A10

Which symbol in figure G7-1 represents a Zener diode?

- A. Symbol 4
- B. Symbol 1
- C. Symbol 11
- D. Symbol 5

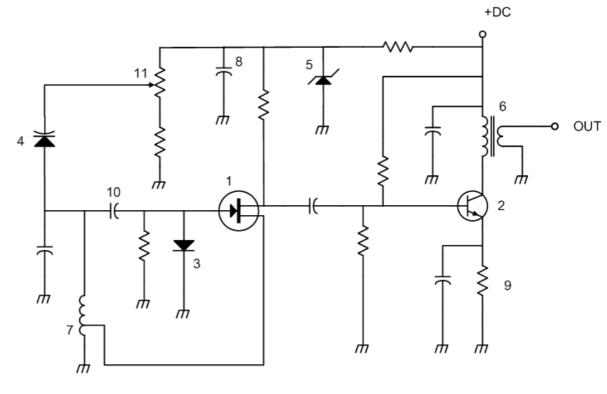


Figure G7-1

<i>27: G7B05</i> How many states does a 3-bit binary counter have?
A. 3
B. 6
✓ C. 8
D. 16

28: G7C04

What circuit is used to combine signals from the IF amplifier and BFO and send the result to the AF amplifier in some single sideband receivers?

- A. RF oscillator
- B. IF filter
- C. Balanced modulator

D. Product detector

Subelement G8

29: G8A08 Which of the following is an effect of overmodulation?

xA. Insufficient audio

- B. Insufficient bandwidth
- C. Frequency drift

D. Excessive bandwidth

30: G8B06

What is the total bandwidth of an FM phone transmission having 5 kHz deviation and 3 kHz modulating frequency?

- A. 3 kHz
- B. 5 kHz
- C. 8 kHz

🗸 D. 16 kHz

31: G8C08

Which of the following statements is true about PSK31?

A. Upper case letters make the signal stronger

B. Upper case letters use longer Varicode signals and thus slow down transmission

C. Varicode Error Correction is used to ensure accurate message reception

D. Higher power is needed as compared to RTTY for similar error rates

Subelement G9

32: G9A01

Which of the following factors determine the characteristic impedance of a parallel conductor antenna feed line?

A. The distance between the centers of the conductors and the radius of the conductors

- B. The distance between the centers of the conductors and the length of the line
- C. The radius of the conductors and the frequency of the signal
- D. The frequency of the signal and the length of the line

33: G9B11

What is the approximate length for a 1/2 wave dipole antenna cut for 3.550 MHz? A. 42 feet

- B. 84 feet
- ✓ C. 131 feet
 - D. 263 feet

34: G9C08

What is meant by the "main lobe" of a directive antenna?

- A. The magnitude of the maximum vertical angle of radiation
- B. The point of maximum current in a radiating antenna element
- C. The maximum voltage standing wave point on a radiating element

D. The direction of maximum radiated field strength from the antenna

35: G9D03

At what height above ground is an NVIS antenna typically installed?

- A. As close to 1/2 wavelength as possible
- B. As close to one wavelength as possible
- C. Height is not critical as long as it is significantly more than 1/2 wavelength
- D. Between 1/10 and 1/4 wavelength

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

You would have passed the exam! Congratulations!

