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: G0A10

What is one thing that can be done if evaluation shows that a neighbor might receive more than the allowable limit of RF exposure from the main lobe of a directional antenna?

- A. Change to a non-polarized antenna with higher gain
- B. Post a warning sign that is clearly visible to the neighbor
- C. Use an antenna with a higher front-to-back ratio
- D. Take precautions to ensure that the antenna cannot be pointed in their direction

2: G0B03

Which size of fuse or circuit breaker would be appropriate to use with a circuit that uses AWG number 14 wiring?

- A. 100 amperes
- B. 60 amperes
- C. 30 amperes

D. 15 amperes

Subelement G1

3: G1A04

Which of the following amateur bands is restricted to communication on only specific channels, rather than frequency ranges?

- A. 11 meters
- B. 12 meters
- C. 30 meters
- D. 60 meters

4: G1B04

Which of the following must be true before amateur stations may provide communications to broadcasters for dissemination to the public?

A. The communications must directly relate to the immediate safety of human life or protection of property and there must be no other means of communication reasonably available before or at the time of the event

B. The communications must be approved by a local emergency preparedness official and conducted on officially designated frequencies

- C. The FCC must have declared a state of emergency
- D. All of these choices are correct

5: G1C05

Which of the following is a limitation on transmitter power on the 28 MHz band for a General Class control operator?

- A. 100 watts PEP output
- B. 1000 watts PEP output
- C. 1500 watts PEP output
 - D. 2000 watts PEP output

6: G1D10

What is the minimum age that one must be to qualify as an accredited Volunteer Examiner?

A. 12 years

B. 18 years

C. 21 years

D. There is no age limit

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: G2A09

Why do most amateur stations use lower sideband on the 160-meter, 75-meter and 40-meter bands?

A. Lower sideband is more efficient than upper sideband at these frequencies

xB. Lower sideband is the only sideband legal on these frequency bands

C. Because it is fully compatible with an AM detector

D. Current amateur practice is to use lower sideband on these frequency bands

9: G2B10

When may the FCC restrict normal frequency operations of amateur stations participating in RACES?

xA. When they declare a temporary state of communication emergency

- B. When they seize your equipment for use in disaster communications
- C. Only when all amateur stations are instructed to stop transmitting
- ✓ D. When the President's War Emergency Powers have been invoked

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: G2D09

What information is traditionally contained in a station log?

- A. Date and time of contact
- B. Band and/or frequency of the contact
- C. Call sign of station contacted and the signal report given

D. All of these choices are correct

12: G2E01

Which mode is normally used when sending an RTTY signal via AFSK with an SSB transmitter?

xA. USB

- B. DSB
- C. CW
- D. LSB

Subelement G3

13: G3A02

What effect does a Sudden lonospheric Disturbance have on the daytime ionospheric propagation of HF radio waves?

A. It enhances propagation on all HF frequencies

B. It disrupts signals on lower frequencies more than those on higher frequencies

- C. It disrupts communications via satellite more than direct communications
- D. None, because only areas on the night side of the Earth are affected

14: G3B09

What is the approximate maximum distance along the Earth's surface that is normally covered in one hop using the F2 region?

- A. 180 miles
- B. 1,200 miles

C. 2,500 miles

D. 12,000 miles

15: G3C12

Which ionospheric layer is the most absorbent of long skip signals during daylight hours on frequencies below 10 MHz?

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

Subelement G4

16: G4A02

What is one advantage of selecting the opposite or "reverse" sideband when receiving CW signals on a typical HF transceiver?

- A. Interference from impulse noise will be eliminated
- B. More stations can be accommodated within a given signal passband

C. It may be possible to reduce or eliminate interference from other signals

D. Accidental out of band operation can be prevented

17: G4B14

What is an instance in which the use of an instrument with analog readout may be preferred over an instrument with a digital readout?

A. When testing logic circuits

xB. When high precision is desired

C. When measuring the frequency of an oscillator

D. When adjusting tuned circuits

18: G4C06

What effect can be caused by a resonant ground connection?

- A. Overheating of ground straps
- B. Corrosion of the ground rod
- C. High RF voltages on the enclosures of station equipment
- xD. A ground loop

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

Why is it best NOT to draw the DC power for a 100 watt HF transceiver from a vehicle's auxiliary power socket?

- A. The socket is not wired with an RF-shielded power cable
- B. The socket's wiring may be inadequate for the current drawn by the transceiver
 - C. The DC polarity of the socket is reversed from the polarity of modern HF transceivers
 - D. Drawing more than 50 watts from this socket could cause the engine to overheat

Subelement G5

21: G5A11

Which of the following describes one method of impedance matching between two AC circuits?

A. Insert an LC network between the two circuits

- B. Reduce the power output of the first circuit
- C. Increase the power output of the first circuit
- D. Insert a circulator between the two circuits

22: G5B01

What dB change represents a two-times increase or decrease in power?

A. Approximately 2 dB

B. Approximately 3 dB

- C. Approximately 6 dB
- D. Approximately 12 dB

23: G5C01

What causes a voltage to appear across the secondary winding of a transformer when an AC voltage source is connected across its primary winding?

- A. Capacitive coupling
- **x**B. Displacement current coupling
- C. Mutual inductance
 - D. Mutual capacitance

Subelement G6

24: G6A14

Which of the following is an advantage of ceramic capacitors as compared to other types of capacitors?

- A. Tight toleranceA. Tight tolerance
- B. High stabilityB. Much less leakage than any other type
- C. High capacitance for given volumeC. High capacitance for a given volume
- D. Comparatively low costD. Inexpensive RF capacitor

Which of the following connectors would be a good choice for a serial data port?

A. PL-259
B. Type N
C. Type SMA

🗸 D. DE-9

Subelement G7

26: G7A05

What portion of the AC cycle is converted to DC by a half-wave rectifier?

- A. 90 degrees
- B. 180 degrees
- C. 270 degrees
- xD. 360 degrees

27: You forgot to answer this one! G7B01

Complex digital circuitry can often be replaced by what type of integrated circuit?

A. Microcontroller

- B. Charge-coupled device
- C. Phase detector
- D. Window comparator

28: G7C01

Which of the following is used to process signals from the balanced modulator then send them to the mixer in some single sideband phone transmitters?

xA. Carrier oscillator

B. Filter

- C. IF amplifier
- D. RF amplifier

Subelement G8

29: G8A10

What is meant by the term flat-topping when referring to a single sideband phone transmission?

A. Signal distortion caused by insufficient collector current

xB. The transmitter's automatic level control (ALC) is properly adjusted

C. Signal distortion caused by excessive drive

D. The transmitter's carrier is properly suppressed

30: G8B01

What receiver stage combines a 14.250 MHz input signal with a 13.795 MHz oscillator signal to produce a 455 kHz intermediate frequency (IF) signal?

🗸 A. Mixer

B. BFO

C. VFO

D. Discriminator

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: G9A08

If the SWR on an antenna feed line is 5 to 1, and a matching network at the transmitter end of the feed line is adjusted to 1 to 1 SWR, what is the resulting SWR on the feed line?

xA. 1 to 1

✓ B. 5 to 1

- C. Between 1 to 1 and 5 to 1 depending on the characteristic impedance of the line
- D. Between 1 to 1 and 5 to 1 depending on the reflected power at the transmitter

33: G9B10

What is the approximate length for a 1/2 wave dipole antenna cut for 14.250 MHz? A. 8 feet

- B. 16 feet
- C. 24 feet
- D. 32 feet

34: G9C10

Which of the following is a Yagi antenna design variable that could be adjusted to optimize forward gain, front-to-back ratio, or SWR bandwidth?

xA. The physical length of the boom

- B. The number of elements on the boom
- C. The spacing of each element along the boom

D. All of these choices are correct

35: G9D06

Which of the following is an advantage of a log periodic antenna?

A. Wide bandwidth

- B. Higher gain per element than a Yagi antenna
- C. Harmonic suppression
- D. Polarization diversity

Results:

You scored 21 correct answers and 14 incorrect answers from a total of 35.

You also forgot to answer 1 questions in the exam.

Unfortunately, you had 14 wrong answers and you are only allowed 9.

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