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: G0A08
Which of the following steps must an amateur operator take to ensure compliance with RF safety regulations when transmitter power exceeds levels specified in FCC Part 97.13?
A. Post a copy of FCC Part 97.13 in the station
B. Post a copy of OET Bulletin 65 in the station
✔ **C. Perform a routine RF exposure evaluation**
xD. All of these choices are correct

2: G0B01
Which wire or wires in a four-conductor connection should be attached to fuses or circuit breakers in a device operated from a 240 VAC single phase source?
✔ **A. Only the two wires carrying voltage**
B. Only the neutral wire
C. Only the ground wire
D. All wires

Subelement G1

3: G1A07
Which of the following frequencies is within the General Class portion of the 20-meter phone band?
A. 14005 kHz
B. 14105 kHz
✔ **C. 14305 kHz**
D. 14405 kHz

4: G1B03
Which of the following is a purpose of a beacon station as identified in the FCC rules?
✔ **A. Observation of propagation and reception**
xB. Automatic identification of repeaters
C. Transmission of bulletins of general interest to Amateur Radio licensees
D. Identifying net frequencies

5: G1C02
What is the maximum transmitting power an amateur station may use on the

12-meter band?

A. 50 watts PEP output
B. 200 watts PEP output
✔ **C. 1500 watts PEP output**
D. An effective radiated power equivalent to 100 watts from a half-wave dipole

6: G1D08

Which of the following criteria must be met for a non-U.S. citizen to be an accredited Volunteer Examiner?

A. The person must be a resident of the U.S. for a minimum of 5 years
✔ **B. The person must hold an FCC granted Amateur Radio license of General Class or above**
C. The personâ€™s home citizenship must be in ITU region 2
D. None of these choices is correct; a non-U.S. citizen cannot be a Volunteer Examiner

7: G1E01

Which of the following would disqualify a third party from participating in stating a message over an amateur station?

✔ **A. The third partyâ€™s amateur license has been revoked and not reinstated**
B. The third party is not a U.S. citizen
C. The third party is a licensed amateur
D. The third party is speaking in a language other than English

Subelement G2

8: G2A06

Which of the following is an advantage when using single sideband as compared to other analog voice modes on the HF amateur bands?

xA. Very high fidelity voice modulation
✔ **B. Less bandwidth used and greater power efficiency**
C. Ease of tuning on receive and immunity to impulse noise
D. Less subject to interference from atmospheric static crashes

9: G2B08

What is the "DX window" in a voluntary band plan?

✔ **A. A portion of the band that should not be used for contacts between stations within the 48 contiguous United States**
B. An FCC rule that prohibits contacts between stations within the United States and possessions in that portion of the band
C. An FCC rule that allows only digital contacts in that portion of the band
D. A portion of the band that has been voluntarily set aside for digital contacts only

10: G2C01

Which of the following describes full break-in telegraphy (QSK)?

A. Breaking stations send the Morse code prosign BK
B. Automatic keyers are used to send Morse code instead of hand keys
C. An operator must activate a manual send/receive switch before and after every transmission
✔ **D. Transmitting stations can receive between code characters and elements**

11: G2D06

How is a directional antenna pointed when making a "long-path" contact with another station?

A. Toward the rising Sun
B. Along the gray line
✔ **C. 180 degrees from its short-path heading**
D. Toward the north

12: G2E11
What is indicated on a waterfall display by one or more vertical lines adjacent to a PSK31 signal?
A. Long Path propagation
B. Backscatter propagation
C. Insufficient modulation
✔ **D. Overmodulation**

Subelement G3

13: G3A16
What is a possible benefit to radio communications resulting from periods of high geomagnetic activity?
✔ **A. Auroras that can reflect VHF signals**
✘B. Higher signal strength for HF signals passing through the polar regions
C. Improved HF long path propagation
D. Reduced long delayed echoes

14: G3B07
What does LUF stand for?
✔ **A. The Lowest Usable Frequency for communications between two points**
B. The Longest Universal Function for communications between two points
C. The Lowest Usable Frequency during a 24 hour period
D. The Longest Universal Function during a 24 hour period

15: G3C13
What is Near Vertical Incidence Sky-wave (NVIS) propagation?
A. Propagation near the MUF
✔ **B. Short distance MF or HF propagation using high elevation angles**
C. Long path HF propagation at sunrise and sunset
D. Double hop propagation near the LUF

Subelement G4

16: G4A07
What condition can lead to permanent damage to a solid-state RF power amplifier?
A. Insufficient drive power
B. Low input SWR
C. Shorting the input signal to ground
✔ **D. Excessive drive power**

17: G4B02
Which of the following is an advantage of an oscilloscope versus a digital voltmeter?
A. An oscilloscope uses less power
B. Complex impedances can be easily measured
C. Input impedance is much lower
✔ **D. Complex waveforms can be measured**

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

xB. 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?
xA. 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: G4E04
Why is it best NOT to draw the DC power for a 100 watt HF transceiver from a vehicleâ€™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: G5A02
What is reactance?
A. Opposition to the flow of direct current caused by resistance
✔ **B. Opposition to the flow of alternating current caused by capacitance or inductance**
C. A property of ideal resistors in AC circuits
D. A large spark produced at switch contacts when an inductor is de-energized

22: G5B05
How many watts are dissipated when a current of 7.0 milliamperes flows through 1.25 kilohms resistance?
✔ **A. Approximately 61 milliwatts**
B. Approximately 61 watts
C. Approximately 11 milliwatts
D. Approximately 11 watts

23: G5C11
What is the inductance of a 20 millihenry inductor connected in series with a 50 millihenry inductor?
A. 0.07 millihenrys
B. 14.3 millihenrys
✔ **C. 70 millihenrys**
D. 1000 millihenrys

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**

25: G6B13
Which of these connector types is commonly used for RF connections at frequencies up to 150 MHz?
A. Octal
B. RJ-11
✔ **C. PL-259**
D. DB-25

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**

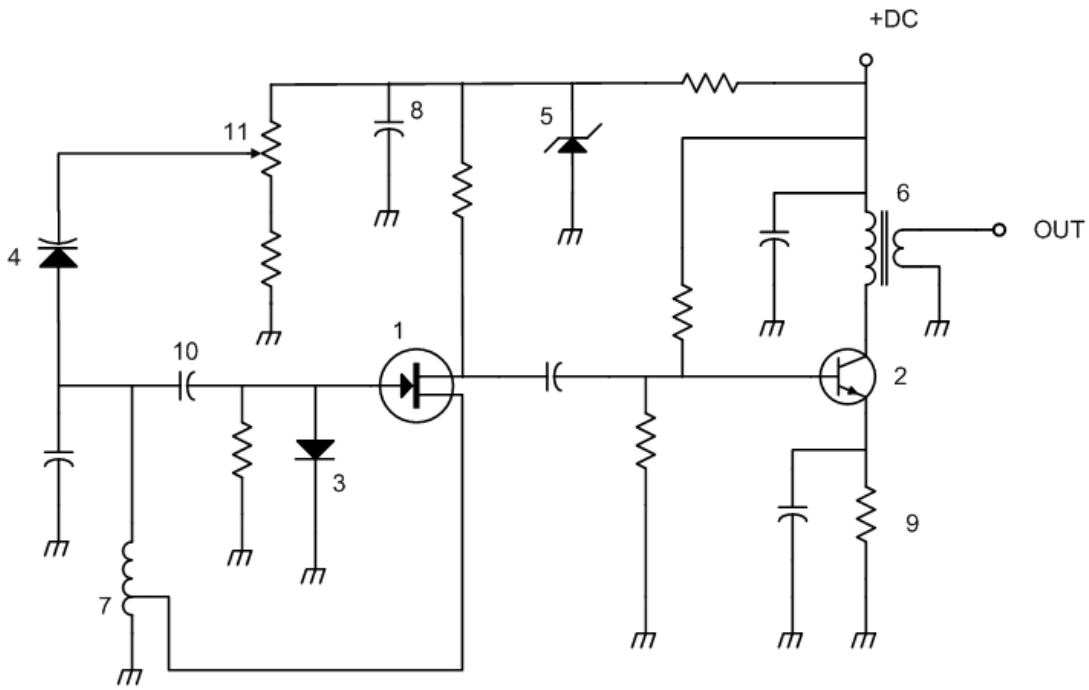

Figure G7-1

27: 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: 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: G8A01
How is an FSK signal generated?

A. By keying an FM transmitter with a sub-audible tone
✔ **B. By changing an oscillatorâ€™s frequency directly with a digital control signal**
C. By using a transceiverâ€™s computer data interface protocol to change frequencies
D. By reconfiguring the CW keying input to act as a tone generator

30: G8B04
What is the stage in a VHF FM transmitter that generates a harmonic of a lower frequency signal to reach the desired operating frequency?

A. Mixer
xB. Reactance modulator
C. Pre-emphasis network
✔ **D. Multiplier**

31: G8C05
In the PACTOR protocol, what is meant by an NAK response to a transmitted packet?

✔ **A. The receiver is requesting the packet be retransmitted**
B. The receiver is reporting the packet was received without error
C. The receiver is busy decoding the packet
D. The entire file has been received correctly

Subelement G9

32: G9A03
What is the characteristic impedance of flat ribbon TV type twinlead?

A. 50 ohms
B. 75 ohms
C. 100 ohms
✔ **D. 300 ohms**

33: G9B12
What is the approximate length for a 1/4 wave vertical antenna cut for 28.5 MHz?

✔ **A. 8 feet**
B. 11 feet
C. 16 feet
D. 21 feet

34: G9C06
What configuration of the loops of a two-element quad antenna must be used for the antenna to operate as a beam antenna, assuming one of the elements is used as a reflector?

A. The driven element must be fed with a balun transformer
B. There must be an open circuit in the driven element at the point opposite the feed point
C. The reflector element must be approximately 5 percent shorter than the driven

element

✔ **D. The reflector element must be approximately 5 percent longer than the driven element**

35: G9D02

Which of the following is an advantage of an NVIS antenna?

xA. Low vertical angle radiation for working stations out to ranges of several thousand kilometers

✔ **B. High vertical angle radiation for working stations within a radius of a few hundred kilometers**

C. High forward gain

D. All of these choices are correct

Results:

You scored 27 correct answers and 8 incorrect answers from a total of 35.

You would have passed the exam! Congratulations!

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