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: G1A09
Which of the following frequencies is within the General Class portion of the 15-meter band?
A. 14250 kHz
B. 18155 kHz
✔ **C. 21300 kHz**
D. 24900 kHz

4: G1B07
What are the restrictions on the use of abbreviations or procedural signals in the Amateur Service?
xA. Only "Q" signals are permitted
✔ **B. They may be used if they do not obscure the meaning of a message**
C. They are not permitted
D. Only "10 codes" are permitted

5: G1C04
Which of the following limitations apply to transmitter power on every amateur band?

✔ **A. Only the minimum power necessary to carry out the desired communications should be used**

B. Power must be limited to 200 watts when transmitting between 14.100 MHz and 14.150 MHz

C. Power should be limited as necessary to avoid interference to another radio service on the frequency

D. Effective radiated power cannot exceed 1500 watts

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: G2A04

Which mode is most commonly used for voice communications on the 17-meter and 12-meter bands?

✔ **A. Upper sideband**

B. Lower sideband

C. Vestigial sideband

D. Double sideband

9: G2B12

When is an amateur station allowed to use any means at its disposal to assist another station in distress?

A. Only when transmitting in RACES

B. At any time when transmitting in an organized net

✔ **C. At any time during an actual emergency**

D. Only on authorized HF frequencies

10: G2C01

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

A. Breaking stations send the Morse code prosign BK

xB. 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: G2D08

What is a reason why many amateurs keep a station log?

A. The ITU requires a log of all international contacts

B. The ITU requires a log of all international third party traffic

C. The log provides evidence of operation needed to renew a license without retest

✔ **D. To help with a reply if the FCC requests information**

12: G2E08
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: G3A13
What does the A-index indicate?
A. The relative position of sunspots on the surface of the Sun
B. The amount of polarization of the Sun's electric field
✔ **C. The long term stability of the Earthâ€™s geomagnetic field**
D. The solar radio flux at Boulder, Colorado

14: G3B12
What factor or factors affect the MUF?
A. Path distance and location
B. Time of day and season
xC. Solar radiation and ionospheric disturbances
✔ **D. All of these choices are correct**

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: G4A04
What reading on the plate current meter of a vacuum tube RF power amplifier indicates correct adjustment of the plate tuning control?
A. A pronounced peak
✔ **B. A pronounced dip**
C. No change will be observed
D. A slow, rhythmic oscillation

17: G4B12
What problem can occur when making measurements on an antenna system with an antenna analyzer?
A. Permanent damage to the analyzer may occur if it is operated into a high SWR
✔ **B. Strong signals from nearby transmitters can affect the accuracy of measurements**
C. The analyzer can be damaged if measurements outside the ham bands are attempted
D. Connecting the analyzer to an antenna can cause it to absorb harmonics

18: G4C09
How can a ground loop be avoided?

A. Connect all ground conductors in series
B. Connect the AC neutral conductor to the ground wire
C. Avoid using lock washers and star washers when making ground connections
✔ **D. Connect all ground conductors to a single point**

19: G4D05
How does a signal that reads 20 dB over S9 compare to one that reads S9 on a receiver, assuming a properly calibrated S meter?
A. It is 10 times less powerful
B. It is 20 times less powerful
C. It is 20 times more powerful
✔ **D. It is 100 times more powerful**

20: G4E09
What is the approximate open-circuit voltage from a fully illuminated silicon photovoltaic cell?
A. 0.02 VDC
✔ **B. 0.5 VDC**
C. 0.2 VDC
D. 1.38 VDC

Subelement G5

21: G5A05
How does an inductor react to AC?
A. As the frequency of the applied AC increases, the reactance decreases
B. As the amplitude of the applied AC increases, the reactance increases
C. As the amplitude of the applied AC increases, the reactance decreases
✔ **D. As the frequency of the applied AC increases, the reactance increases**

22: G5B11
What is the ratio of peak envelope power to average power for an unmodulated carrier?
A. 0.707
✔ **B. 1.00**
C. 1.414
D. 2.00

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: G6A06
Which of the following is an advantage of using a Schottky diode in an RF switching circuit rather than a standard silicon diode?
✔ **A. Lower capacitance**
B. Lower inductance
C. Longer switching times

D. Higher breakdown voltage

25: G6B01
Which of the following is an analog integrated circuit?
A. NAND Gate
B. Microprocessor
C. Frequency Counter
✔ **D. Linear voltage regulator**

Subelement G7

26: G7A11
Which symbol in figure G7-1 represents an NPN junction transistor?
xA. Symbol 1
✔ **B. Symbol 2**
C. Symbol 7
D. Symbol 11

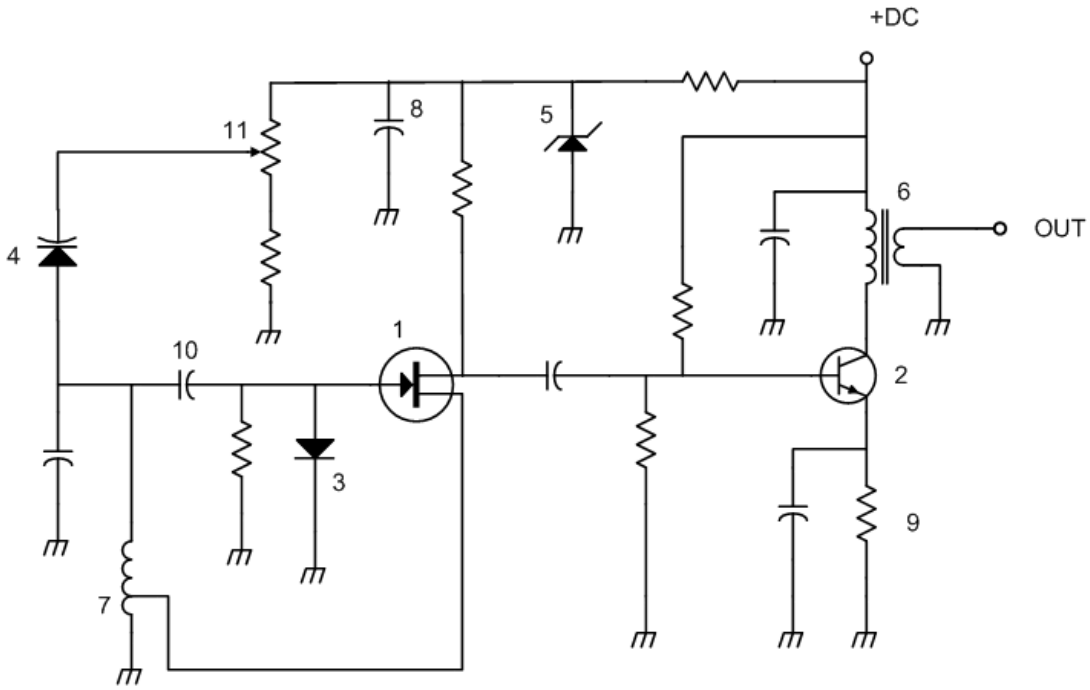

Figure G7-1

27: G7B12
Which of these classes of amplifiers has the highest efficiency?
A. Class A
B. Class B
C. Class AB
✔ **D. Class C**

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?

A. Carrier oscillator
✔ **B. Filter**
C. IF amplifier
D. RF amplifier

Subelement G8

29: G8A01
How is an FSK signal generated?
xA. 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: 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: G8C02
How many data bits are sent in a single PSK31 character?
✔ **A. The number varies**
B. 5
C. 7
D. 8

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: G9C16
How does the gain of a two-element delta-loop beam compare to the gain of a two-element quad antenna?
A. 3 dB higher
B. 3 dB lower
C. 2.54 dB higher
✔ **D. About the same**

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

You would have passed the exam! Congratulations!

e›

Click here to take another test.

Please mail any comments to me, Simon AA9PW, I appreciate your feedback. If you Like the site, please Like us on Facebook!