

## Results for sample general2015 test paper

Your answers are marked like this:

✓ **A. You got this question right, this is your correct answer.**

✗ *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: G0A07

**What effect does transmitter duty cycle have when evaluating RF exposure?**

- ✓ **A. A lower transmitter duty cycle permits greater short-term exposure levels**
- B. A higher transmitter duty cycle permits greater short-term exposure levels
- C. Low duty cycle transmitters are exempt from RF exposure evaluation requirements
- D. High duty cycle transmitters are exempt from RF exposure requirements

2: G0B04

**Which of the following is a primary reason for not placing a gasoline-fueled generator inside an occupied area?**

- ✓ **A. Danger of carbon monoxide poisoning**
- B. Danger of engine over torque
- C. Lack of oxygen for adequate combustion
- D. Lack of nitrogen for adequate combustion

### 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: G1B05

**When may music be transmitted by an amateur station?**

- A. At any time, as long as it produces no spurious emissions
- B. When it is unintentionally transmitted from the background at the transmitter
- C. When it is transmitted on frequencies above 1215 MHz
- ✓ **D. When it is an incidental part of a manned space craft retransmission**

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: G1D01

**Who may receive credit for the elements represented by an expired amateur radio license?**

✓ **A. Any person who can demonstrate that they once held an FCC issued General, Advanced, or Amateur Extra class license that was not revoked by the FCC**

B. Anyone who held an FCC issued amateur radio license that has been expired for not less than 5 years and not more than 15 years

✗ **C. Any person who previously held an amateur license issued by another country, but only if that country has a current reciprocal licensing agreement with the FCC**

D. Only persons who once held an FCC issued Novice, Technician, or Technician Plus license

7: G1E07

**With which foreign countries is third party traffic prohibited, except for messages directly involving emergencies or disaster relief communications?**

A. Countries in ITU Region 2

B. Countries in ITU Region 1

✓ **C. Every foreign country, unless there is a third party agreement in effect with that country**

D. Any country which is not a member of the International Amateur Radio Union (IARU)

## 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: G2B09

**Who may be the control operator of an amateur station transmitting in RACES to assist relief operations during a disaster?**

✓ **A. Only a person holding an FCC issued amateur operator license**

B. Only a RACES net control operator

C. A person holding an FCC issued amateur operator license or an appropriate government official

✗ **D. Any control operator when normal communication systems are operational**

10: G2C09

**What does the Q signal "QSL" mean?**

A. Send slower

B. We have already confirmed by card

✓ **C. I acknowledge receipt**

D. We have worked before

11: G2D10

**What is QRP operation?**

A. Remote piloted model control

✓ **B. Low power transmit operation**

- C. Transmission using Quick Response Protocol
- D. Traffic relay procedure net operation

12: G2E09

**How do you join a contact between two stations using the PACTOR protocol?**

- A. Send broadcast packets containing your call sign while in MONITOR mode
- B. Transmit a steady carrier until the PACTOR protocol times out and disconnects
- ✓ C. **Joining an existing contact is not possible, PACTOR connections are limited to two stations**
- ✗ D. Send a NAK response continuously so that the sending station has to pause

## Subelement G3

13: G3A06

**What is a geomagnetic storm?**

- A. A sudden drop in the solar flux index
- B. A thunderstorm which affects radio propagation
- C. Ripples in the ionosphere
- ✓ D. **A temporary disturbance in the Earth's magnetosphere**

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: 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: G4A03

**What is normally meant by operating a transceiver in "split" mode?**

- A. The radio is operating at half power
- B. The transceiver is operating from an external power source
- ✓ C. **The transceiver is set to different transmit and receive frequencies**
- D. The transmitter is emitting an SSB signal, as opposed to DSB operation

17: G4B03

**Which of the following is the best instrument to use when checking the keying waveform of a CW transmitter?**

- ✓ A. **An oscilloscope**
- B. A field strength meter
- C. A sidetone monitor
- D. A wavemeter

18: G4C07

**What is one good way to avoid unwanted effects of stray RF energy in an amateur**

station?

☒ **A. Connect all equipment grounds together**

- B. Install an RF filter in series with the ground wire
- C. Use a ground loop for best conductivity
- D. Install a few ferrite beads on the ground wire where it connects to your station

19: G4D04

**What does an S meter measure?**

- A. Conductance
- B. Impedance

☒ **C. Received signal strength**

- D. Transmitter power output

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: 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: G5B10

**What percentage of power loss would result from a transmission line loss of 1 dB?**

- A. 10.9 percent
- B. 12.2 percent

☒ **C. 20.5 percent**

- D. 25.9 percent

23: G5C17

**What is the value in nanofarads (nF) of a 22,000 pF capacitor?**

- A. 0.22 nF
- B. 2.2 nF

☒ **C. 22 nF**

- D. 220 nF

## Subelement G6

24: G6A16

**What will happen to the resistance if the temperature of a resistor is increased?**

- A. It will change depending on the resistor's reactance coefficient
- B. It will stay the same

☒ **C. It will change depending on the resistor's temperature coefficient**

D. It will become time dependent

25: G6B06

**What kind of device is an integrated circuit operational amplifier?**

A. Digital

☒ B. MMIC

C. Programmable Logic

☒ D. Analog

## 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

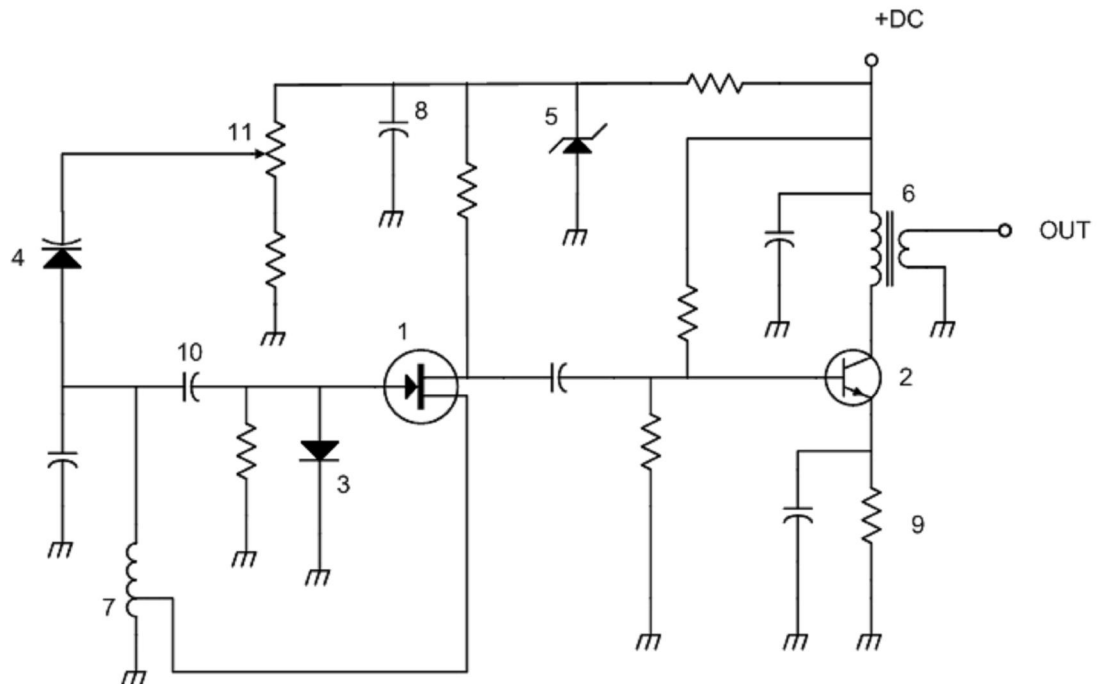


Figure G7-1

27: G7B07

**What are the basic components of virtually all sine wave oscillators?**

A. An amplifier and a divider

B. A frequency multiplier and a mixer

C. A circulator and a filter operating in a feed-forward loop

☒ D. A filter and an amplifier operating in a feedback loop

28: G7C07

**What is the simplest combination of stages that implement a superheterodyne receiver?**

- A. RF amplifier, detector, audio amplifier
- B. RF amplifier, mixer, IF discriminator
- ✓ C. HF oscillator, mixer, detector
- D. HF oscillator, prescaler, audio amplifier

## Subelement G8

29: G8A08

Which of the following is an effect of overmodulation?

- A. 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: G8C10

How does forward error correction (FEC) allow the receiver to correct errors in received data packets?

- A. By controlling transmitter output power for optimum signal strength
- B. By using the varicode character set
- ✓ C. By transmitting redundant information with the data
- ✗ D. By using a parity bit with each character

## 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: G9B05

How does antenna height affect the horizontal (azimuthal) radiation pattern of a horizontal dipole HF antenna?

- A. If the antenna is too high, the pattern becomes unpredictable
- B. Antenna height has no effect on the pattern
- ✓ C. If the antenna is less than 1/2 wavelength high, the azimuthal pattern is almost omnidirectional
- D. If the antenna is less than 1/2 wavelength high, radiation off the ends of the wire is eliminated

34: G9C18

What happens when the feed point of a quad antenna of any shape is moved from the midpoint of the top or bottom to the midpoint of either side?

- ☒ **A. The polarization of the radiated signal changes from horizontal to vertical**
- B. The polarization of the radiated signal changes from vertical to horizontal
- C. There is no change in polarization
- D. The radiated signal becomes circularly polarized

35: G9D08

**Why is a Beverage antenna not used for transmitting?**

- A. Its impedance is too low for effective matching
- ☒ **B. It has high losses compared to other types of antennas**
- C. It has poor directivity
- D. All of these choices are correct

**Results:**

**You scored 28 correct answers and 7 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!

