B-002-006-008 **(B)**

By how many times must the power output of a transmitter be increased to raise the S-meter reading on a nearby receiver from S8 to S9?

A Approximately 2 times
B Approximately 4 times
C Approximately 5 times
D Approximately 3 times

B-002-006-009 **(A)**

What does "RST 579" mean in a Morse code contact?

A Your signal is perfectly readable, moderately strong, and with perfect tone
B Your signal is perfectly readable, weak strength, and with perfect tone
C Your signal is fairly readable, fair strength, and with perfect tone
D Your signal is barely readable, moderately strong, and with faint ripple

B-002-006-010 **(B)**

What does "RST 459" mean in a Morse code contact?

A Your signal is moderately readable, very weak, and with hum on the tone
B Your signal is quite readable, fair strength, and with perfect tone
C Your signal is very readable, very strong, and with perfect tone
D Your signal is barely readable, very weak, and with perfect tone

B-002-006-011 **(B)**

What is the meaning of "Your signal report is 1 1"?

A Your signal is very readable and very strong
B Your signal is unreadable, and barely perceptible
C Your signal is 11 dB over S9
D Your signal is first class in readability and first class in strength

B-002-007-001 **(A)**

What is the meaning of the Q signal "QRS"?

A Send more slowly
B Interference from static
C Send "RST" report
D Radio station location is:

B-002-007-002 **(C)**

What is one meaning of the Q signal "QTH"?

A My name is
B Time here is
C My location is
D Stop sending

B-002-007-003 **(D)**

What is the proper Q signal to use to see if a frequency is in use before transmitting on CW?

A QRV?
B QRU?
C QRZ?
D QRL?

B-002-007-004 **(A)**

What is one meaning of the Q signal "QSY"?

A Change frequency
B Use more power
C Send faster
D Send more slowly

B-002-007-005 **(A)**

What is the meaning of the Q signal "QSB"?

A Your signal is fading
B I am busy
C I have no message
D A contact is confirmed

B-002-007-006 **(C)**

What is the proper Q signal to ask who is calling you on CW?

A QRL?
B QRT?
C QRZ?
D QSL?

B-002-007-007 **(A)**

The signal "QRM" signifies:

A I am being interfered with
B I am troubled by static
C your signals are fading
D is my transmission being interfered with

B-002-007-008 **(D)**

The signal "QRN" means:

A I am busy
B Is my transmission being interfered with
C I am being interfered with
D are you troubled by static

B-002-007-009 **(A)**

The "Q signal" indicating that you want the other station to send slower is:

A QRS
B QRM
C QRL
D QRN

B-002-007-010 **(B)**

Who is calling me is denoted by the "Q signal":

A QRM?
B QRZ?
C QRK?
D QRP?

B-002-007-011 **(B)**

The "Q signal" which signifies "I will call you again" is:

A QRT
B QRX
C QRZ
D QRS

B-002-008-001 **(D)**

When may you use your amateur station to transmit an "SOS" or "MAYDAY"?

A Never
B Only at specific times (at 15 and 30 minutes after the hour)
C Only in case of a severe weather watch
D In a life-threatening distress situation

B-002-008-002 **(C)**

If you are in contact with another station and you hear an emergency call for help on your frequency, what should you do?

A Direct the calling station to the nearest emergency net frequency
B Call your local police station and inform them of the emergency call
C Immediately stop your contact and acknowledge the emergency call
D Tell the calling station that the frequency is in use

B-002-008-003 **(B)**

What is the proper distress call to use when operating phone?

A Say "HELP" several times
B Say "MAYDAY" several times
C Say "SOS" several times
D Say "EMERGENCY" several times

B-002-008-004 **(A)**

What is the proper distress call to use when operating CW?

A SOS
B CQD
C QRRR
D MAYDAY

B-002-008-005 **(B)**

What is the proper way to interrupt a repeater conversation to signal a distress call?

A Say "HELP" as many times as it takes to get someone to answer
B Break-in immediately following the transmission of the active party and state your situation and call sign
C Say "EMERGENCY" three times
D Say "SOS," then your call sign

B-002-008-006 **(C)**

Why is it a good idea to have a way to operate your amateur station without using commercial AC power lines?

A So you may operate in contests where AC power is not allowed
B So you may use your station while mobile
C So you may provide communications in an emergency
D So you will comply with rules

B-002-008-007 **(C)**

What is the most important accessory to have for a hand-held radio in an emergency?

A A portable amplifier
B A microphone headset for hands-free operation
C Several sets of charged batteries
D An extra antenna

B-002-008-008 **(D)**

Which type of antenna would be a good choice as part of a portable HF amateur station that could be set up in case of an emergency?

A A parabolic dish
B A three-element Yagi
C A three-element quad
D A dipole

B-002-008-009 **(B)**

If you are communicating with another amateur station and hear a station in distress break in, what should you do?

A Immediately cease all transmissions because stations in distress have emergency rights to the frequency
B Acknowledge the station in distress and determine its location and what assistance may be needed
C Continue your communication because you were on frequency first
D Change to a different frequency so the station in distress may have a clear channel to call for assistance

B-002-008-010 **(B)**

In order of priority, a distress message comes before:

A a safety message
B an emergency message
C no other messages
D a government priority message

B-002-008-011 **(B)**

If you hear distress traffic and are unable to render direct assistance you should:

A tell all other stations to cease transmitting
B contact authorities and then maintain watch until you are certain that assistance will be forthcoming
C enter the details in the log book and take no further action
D take no action

B-002-009-001 **(A)**

What is a "QSL card"?

A A written proof of communication between two amateurs
B A Notice of Violation from Innovation, Science and Economic Development Canada
C A postcard reminding you when your certificate will expire
D A letter or postcard from an amateur pen pal

B-002-009-002 **(A)**

What is an azimuthal map?

A A map projection centered on a particular location, used to determine the shortest path between points on the Earth's surface
B A map projection centered on the North Pole
C A map that shows the angle at which an amateur satellite crosses the equator
D A map that shows the number of degrees longitude that an amateur satellite appears to move westward at the equator

B-002-009-003 **(D)**

What is the most useful type of map to use when orienting a directional HF antenna toward a distant station?

A Mercator
B Polar projection
C Topographical
D Azimuthal

B-002-009-004 **(A)**

A directional antenna pointed in the long-path direction to another station is generally oriented how many degrees from its short-path heading?

A 180 degrees
B 45 degrees
C 90 degrees
D 270 degrees

B-002-009-005 **(D)**

What method is used by radio amateurs to provide written proof of communication between two amateur stations?

A A two-page letter containing a photograph of the operator
B A radiogram sent over the CW traffic net
C A packet message
D A signed post card listing contact date, time, frequency, mode and power, called a "QSL card"

B-002-009-006 **(B)**

You hear other local stations talking to radio amateurs in New Zealand but you don't hear those stations with your beam aimed on the normal compass bearing to New Zealand. What should you try?

A Point your antenna to the south
B Point your beam 180 degrees away from that bearing and listen for the stations arriving on the "long-path"
C Point your antenna toward Newington, Connecticut
D Point your antenna to the north

B-002-009-007 **(D)**

Which statement about recording all contacts and unanswered "CQ calls" in a station logbook or computer log is not correct?

A A log is important for recording contacts for operating awards
B A well-kept log preserves your fondest amateur radio memories for years
C A log is important for handling neighbour interference complaints
D A logbook is required by Innovation, Science and Economic Development Canada

B-002-009-008 **(C)**

Why would it be useful to have an azimuthal world map centred on the location of your station?

A Because it shows the angle at which an amateur satellite crosses the equator
B Because it shows the number of degrees longitude that an amateur satellite moves west
C Because it shows the compass bearing from your station to any place on Earth, for antenna planning and pointing
D Because it looks impressive

B-002-009-009 **(D)**

Station logs and confirmation (QSL) cards are always kept in UTC (Universal Time Coordinated). Where is that time based?

A Geneva, Switzerland
B Ottawa, Canada
C Newington, Connecticut
D Greenwich, England

B-002-009-010 **(C)**

When referring to contacts in the station log, what do the letters UTC mean?

A Unlisted Telephone Call
B Unlimited Time Capsule
C Universal Time Coordinated (formerly Greenwich Mean Time - GMT)
D Universal Time Constant

B-002-009-011 **(B)**

To set your station clock accurately to UTC, you could receive the most accurate time off the air from _____?

A Your local radio station
B CHU, WWV or WWVH
C A non-directional beacon station
D Your local television station

B-003-001-001 **(C)**

A low pass filter in an HF station is most effective when connected:

A as close as possible to the antenna
B midway between the transceiver and antenna
C as close as possible to the transceiver output
D as close as possible to the antenna tuner output

B-003-001-002 **(C)**

A low pass filter in an HF station is most effective when connected:

A as close as possible to the antenna tuner output
B as close as possible to the linear amplifier input
C as close as possible to the linear amplifier output
D as close as possible to the antenna

B-003-001-003 **(A)**

In designing an HF station, which component would you use to reduce the effects of harmonic radiation?

A Low pass filter
B Dummy load
C Antenna switch
D SWR bridge

B-003-001-004 **(C)**

Which component in an HF station is the most useful for determining the effectiveness of the antenna system?

A Linear amplifier
B Dummy load
C SWR bridge
D Antenna switch

B-003-001-005 **(C)**

Of the components in an HF station, which component would normally be connected closest to the antenna, antenna tuner and dummy load?

A Low pass filter
B SWR bridge
C Antenna switch
D Transceiver

B-003-001-006 **(C)**

Of the components in an HF station, which component would be used to match impedances between the transceiver and antenna?

A Dummy load
B SWR bridge
C Antenna tuner
D Antenna switch

B-003-001-007 **(D)**

In an HF station, which component is temporarily connected in the tuning process or for adjustments to the transmitter?

A SWR bridge
B Low pass filter
C Antenna tuner
D Dummy load

B-003-001-008 **(C)**

In an HF station, the antenna tuner is usually used for matching the transceiver with:

A mono-band Yagi type antennas
B tri-band Yagi antennas
C most antennas when operating below 14 MHz
D most antennas when operating above 14 MHz

B-003-001-009 **(B)**

In an HF Station, the antenna tuner is commonly used:

A to tune low pass filters
B with most antennas when operating below 14 MHz
C with most antennas when operating above 14 MHz
D to tune into dummy loads

B-003-002-001 **(A)**

In a frequency modulation transmitter, the input to the speech amplifier is connected to the:

A microphone
B modulator
C power amplifier
D frequency multiplier

B-003-002-002 **(C)**

In a frequency modulation transmitter, the microphone is connected to the:

A power amplifier
B oscillator
C speech amplifier
D modulator

B-003-002-003 **(C)**

In a frequency modulation transmitter, the _____is in between the speech amplifier and the oscillator.

A microphone
B frequency multiplier
C modulator
D power amplifier

B-003-002-004 **(A)**

In a frequency modulation transmitter, the _____is located between the modulator and the frequency multiplier.

A oscillator
B speech amplifier
C power amplifier
D microphone

B-003-002-005 **(A)**

In a frequency modulation transmitter, the _____is located between the oscillator and the power amplifier.

A frequency multiplier
B microphone
C speech amplifier
D modulator

B-003-002-006 **(D)**

In a frequency modulation transmitter, the _____ is located between the frequency multiplier and the antenna.

A modulator
B speech amplifier
C oscillator
D power amplifier

B-003-002-007 **(A)**

In a frequency modulation transmitter, the power amplifier output is connected to the:

A antenna
B frequency multiplier
C microphone
D modulator

B-003-003-001 **(A)**

In a frequency modulation receiver, the _____is connected to the input of the radio frequency amplifier.

A antenna
B mixer
C frequency discriminator
D limiter

B-003-003-002 **(C)**

In a frequency modulation receiver, the _____ is in between the antenna and the mixer.

A local oscillator
B intermediate frequency amplifier
C radio frequency amplifier
D audio frequency amplifier

B-003-003-003 **(A)**

In a frequency modulation receiver, the output of the local oscillator is fed to the:

A mixer
B radio frequency amplifier
C limiter
D antenna