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01-9
The holder of a General Amateur Operator Certificate of Competency may:
   retransmit public broadcasts
   transmit in bands allocated to the Amateur Service
c repair radio equipment for profit
d transmit on public service frequencies
02-0
As the holder of a New Zealand General Amateur Operator Certificate of Competency,
you may operate:
a within your local Postal District
b anywhere in the world
  only at your home address anywhere in New Zealand and in any other country that recognises the Certificate
С
d
A person may hold a General Amateur Operator Certificate of Competency after reaching
this minimum age:
a 18 years
  21 years
  there is no age limit
  the age for holding a motor vehicle driver's licence
Your amateur station is identified by transmitting your:
  full name and address
   "handle"
c first name and location
d callsign
05-5
A General Amateur Operator Certificate of Competency:
  expires after 12 months
  contains the unique callsign(s) to be used by that operator
С
   is transferable to any member of the family
d
   gives licence for the transmission of radio waves
Amateur radio operators may knowingly interfere with other radio communications or
signals:
   when tuning up a transmitting system
   when another station already occupies your proposed transmitting frequency
d if resulting interference is going to be inevitable
A General Amateur Operator Certificate of Competency:
  has a limited life-time
  does not confer on its holder a monopoly on the use of any frequency or band
c is transferable to your descendants
  provides a waiver over copyright
In New Zealand, the "10 metre band" frequency limits are:
  28.00 to 28.55 MHz
  28.00 to 28.65 MHz
b
    28.00 to 29.70 MHz
С
  28.00 to 29.75 MHz
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09-8
When the Amateur Service is a secondary user of a band and another service is the
primary user, this means:
  nothing at all, because all services have equal rights to operate
  amateurs may only use the band during declared emergencies
c the band may be used by amateurs provided harmful interference is not caused to
other services
d you may increase transmitter power to overcome any interference
The term describing opposition to electron flow in a circuit is:
  current
b
   voltage
   power
d resistance
11-6
An electrical insulator:
   lets electricity flow through it in one direction
   lets electricity flow through it
   lets electricity flow through it when light shines on it
   does not let electricity flow through it
12-6
The unit for the potential difference between two points in a circuit is the:
a ampere
c volt
d coulomb
13 - 1
A current of 10 mA is measured in a 500 ohm resistor. The voltage across the resistor
will be:
  50 volt
а
b
   5 volt
   500 volt
  5000 volt
d
14 - 1
A circuit has a total resistance of 100 ohm and 50 volt is applied across it. The
current flow will be:
  500 mA
b
  50 mA
c 2 ampere
d
  20 ampere
The total resistance in a parallel circuit:
  depends upon the voltage drop across each branch
   could be equal to the resistance of one branch
    is always less than the smallest branch resistance
    depends upon the applied voltage
The following resistor combination can most nearly replace a single 150 ohm resistor:
a three 47 ohm resistors in series
   four 47 ohm resistors in parallel
  five 33 ohm resistors in parallel
  five 33 ohm resistors in series
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17-7
Two 33 ohm resistors are connected in series with a power supply. If the current
flowing is 100 mA, the voltage across one of the resistors is:
  3.3 volt
  66 volt
c 33 volt
d 1 volt
18-5
A current of 500 milliamp passes through a 1000 ohm resistance. The power dissipated
  250 watt
  0.25 watt
2.5 watt
b
С
d 25 watt
19-1
The following two electrical units multiplied together give the unit "watt":
a volt and farad
   volt and ampere
c farad and henry
d ampere and henry
20-3
The current in an AC circuit completes a cycle in 0.1 second. So the frequency is:
a 1 Hz
  1000 Hz
c 100 Hz
d 10 Hz
21 - 5
Three 15 picofarad capacitors are wired in parallel. The value of the combination is:
a 18 picofarad
  12 picofarad
С
   5 picofarad
  45 picofarad
d
An inductor and a capacitor form a resonant circuit. If the value of the inductor is
decreased by a factor of four, the resonant frequency will:
   increase by a factor of two
  increase by a factor of four
  decrease by a factor of two
С
  decrease by a factor of four
23-0
You can safely remove an unconscious person from contact with a high voltage source
by:
a pulling an arm or a leg
  turning off the high voltage and then removing the person
  wrapping the person in a blanket and pulling to a safe area
C
   calling an electrician
A low-level signal is applied to a transistor circuit input and a higher-level signal
is present at the output. This effect is known as:
   detection
  modulation
b
c amplification
d rectification
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25 - 3
Bipolar transistors usually have:
   4 connecting leads
   1 connecting lead
c 3 connecting leads
d 2 connecting leads
26-0
In a tetrode valve, the electron flow is from the:
  cathode through the control grid then screen grid to the anode
  emitter through the control grid to the collector
c cathode through the screen grid then control grid to the anode
  source through the Faraday shield to the drain
27-6
An ammeter should not be connected directly across the terminals of a 12 volt car
battery because:
   no current will flow because no other components are in the circuit
   the resulting high current will probably destroy the ammeter
   the battery voltage will be too low for a measurable current to flow
  the battery voltage will be too high for a measurable current to flow
28-7
Two amplifiers with gains of 10 dB and 40 dB are connected in cascade. The gain of
the combination is:
a 8 dB
  30 dB
c 50 dB
  400 dB
29-5
In an HF station, the "low pass filter" must be rated to:
   carry the full power output from the station
   filter out higher-frequency modulation components for maximum intelligibility
С
   filter out high-amplitude sideband components
d
    emphasise low-speed Morse code output
In a frequency modulation receiver, this is located between the mixer and the
intermediate frequency amplifier:
   the limiter
   the frequency discriminator
  a filter
d the radio frequency amplifier
31 - 9
In a single sideband and CW receiver, this is connected to the output of the audio
frequency amplifier:
  the speaker and/or headphones
b
  the mixer
   the radio frequency amplifier
C
   the beat frequency oscillator
The sensitivity of a receiver specifies:
a the bandwidth of the RF preamplifier
   its ability to receive weak signals
   the stability of the oscillator
   its ability to reject strong signals
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33 - 9
The AGC circuit in a receiver usually controls the:
   RF and IF stages
  audio stage
  mixer stage
d power supply
34 - 7
A double conversion receiver usually has:
  a high-frequency IF stage followed by a much lower frequency IF stage
  only one IF stage
c poor image frequency rejection
  two IF stages and a discriminator
35-2
A multi-conversion superhet receiver is more susceptible to spurious responses than a
single-conversion receiver, because of the:
a poorer selectivity in the IF caused by the multitude of frequency changes
   greater sensitivity introducing higher levels of RF to the receiver
   additional oscillators and mixing frequencies involved in the design
  AGC being forced to work harder causing the stages concerned to overload
36-4
Very low noise figures for a high frequency receiver are relatively unimportant
because:
a the received signal creates high noise levels
  the use of SSB and CW on the HF bands overcomes the noise, regardless of the
front end
c external HF noise, man-made and natural, are higher than the internal noise
generated by the receiver
d the succeeding stages, when used on HF, are very noisy
37 - 1
In a frequency modulation transmitter, the microphone is connected to the:
  speech amplifier
   modulator
c power amplifier
d oscillator
38-2
In a single sideband transceiver, the device common to both transmit and receive that
sets most of the performance characteristics is the:
a mixer
  variable frequency oscillator (VFO)
c linear amplifier
  sideband filter
39-1
The signal from a CW transmitter consists of:
  an RF waveform which is keyed on and off to form Morse characters
   a continuous unmodulated RF waveform
   a continuous RF waveform modulated with an 800 Hz Morse signal
  a continuous RF waveform which changes frequency in synchronism with an applied
Morse signal
40 - 1
The third harmonic of 7 MHz is:
   10 MHz
  21 MHz
c 14 MHz
  28 MHz
d
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41 - 0
Harmonics are to be avoided because they:
  cause damage to amateur equipment
  make your signal unreadable at other stations on that band
c cause possible interference to other users of that band
  cause possible interference to services using other bands
42-9
Electrolytic capacitors are used in power supplies because:
   they are tuned to operate at 50 Hz
   they can be obtained in larger values than other types
    they have very low losses compared to other types
С
d
   they radiate less RF noise than other types
A transformer is used in a power supply to:
  transform the incoming mains AC voltage to a DC voltage
   ensure that any RF radiation cannot get into the power supply
   transform the mains AC voltage to a more convenient AC voltage
  transform the mains AC waveform into a higher frequency waveform
44-5
The accepted way to announce that you are listening to a VHF repeater is:
    "hello 7225, this is ZL2ZZZ listening"
   "ZL2ZZZ listening on 7225"
   "calling 7225, 7225, 7225 from ZL2ZZZ"
   "7225 from ZL2ZZZ"
45-2
"Break-in keying" means:
a unauthorised entry has resulted in station equipment disappearing
b temporary emergency operating
c key-down changes the station to transmit, key-up to receive
  the other station's keying is erratic
46-0
A noise blanker on a receiver is most effective to reduce:
  50 Hz power supply hum
   noise originating from the mixer stage of the receiver
h
   ignition noise
  noise originating from the RF stage of the receiver
47-0
The signal "QRM?" means:
a your signals are fading
    are you troubled by static?
c is my transmission being interfered with?
d your transmission is being interfered with
48-6
An HF coaxial feedline is constructed from:
  a single conductor
  two parallel conductors separated by spacers
c braid and insulation around a central conductor
  braid and insulation twisted together
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49-4
A switching system to use a single antenna for a separate transmitter and receiver
should also:
   disconnect the antenna tuner
   ground the antenna on receive
c disable the unit not being used
  switch between power supplies
50-9
Radio wave polarisation is defined by the orientation of the radiated:
  electric field
b magnetic field
  inductive field capacitive field
С
d
51-8
A dummy antenna:
a attenuates a signal generator to a desirable level
   provides more selectivity when a transmitter is being tuned
   duplicates the characteristics of an antenna without radiating signals
  matches an AF generator to the receiver
52-4
Insulators are used at the end of suspended antenna wires to:
   increase the effective antenna length
  make the antenna look more attractive
c prevent any loss of radio waves by the antenna
d limit the electrical length of the antenna
53-2
An antenna type commonly used on HF is the:
a parabolic dish
  13-element Yagi
c helical Yagi
  cubical quad
The highest frequency that will be reflected back to the earth at any given time is
known as the:
   UHF
а
b
   OWF
  MUF
С
  LUF
55-5
Propagation on 80 metres during the summer daylight hours is limited to relatively
short distances because of:
  the disappearance of the E layer
  high absorption in the D layer
c poor refraction by the F layer
  pollution in the T layer
The type of atmospheric layers which will best return signals to earth are:
a oxidised layers
b heavy cloud layers
   sun spot layers
С
  ionised layers
d
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57-7

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When living in a densely-populated area, it is wise to:
   use the minimum transmitter output power necessary
   always use maximum transmitter output power
c only transmit during popular television programme times
d point the beam at the maximum number of television antennas
58-7
A band-stop filter will:
a stop frequencies each side of a band
b pass frequencies each side of a band
c only allow one spot frequency through
d pass frequencies below 100 MHz
59-3
A high-pass RF filter would normally be fitted:
a at the antenna terminals of a TV receiver
  between transmitter output and feedline
  at the Morse key or keying relay in a transmitter between microphone and speech amplifier
60-3
The following are three digital communication modes:
a DSBSC, PACTOR, NBFM b AMTOR, PACTOR, PSK31
c AGC, FSK, Clover
d PSK31, AFC, PSSN
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