

Foundation question bank.

In a foundation licence exam you will get a mix of questions from the question bank.

The foundation licence exam has the following specified number of questions:

Sections 1 and 2 combined – 7 questions

Section 3 – 2 questions

Section 4 – 2 questions

Section 5 – 2 questions

Section 6 – 2 questions

Section 7 – 5 questions

Section 8 – Practical

Section 9 – 5 questions

Read the The Foundation Licence Manual "Your Entry Into Amateur Radio" to find out about mix of questions.

Questions from all sections of the syllabus (except section 8 – practical).

Foundation Licence: All Questions from the question bank.

First answer is the correct answer.

There are 61 questions in the question bank.

[Section: 1.](#)

Question: Amateur Radio frequencies can be used by

Amateur licence holders for self training

Anyone who holds a first class operators certificate

Anyone authorised by the ACMA who has an advanced UHF CB certificate

International marine radio operators and amateur radio licence holders

[Section: 1.](#)

Question: The amateur radio frequencies:

May be shared by other services

Are only for use by licensed amateur operators

Can only be used by amateur radio licence holders for national and international communications

Can be used by other services, but they must give preference to licensed amateurs

Section: 1.

Question: Amateur radio is an international hobby, for anyone who has a HF transceiver.

False

True

Section: 1.

Question: A Radio Amateur's licence allows them to operate on the:

Amateur band

Broadcast band

Marine band

Aeronautical band

Section: 1.

Question: Amateur operators are authorised to use:

Bands authorised for amateur use

Bands authorised for amateur and CB use only

Any frequency that is not being used

All frequencies allocated, including marine and aeronautical

Section: 2.

Question: An amateur operator:

May not transmit coded messages

Can not transmit coded messages for commercial gain

Can not transmit coded messages for commercial gain. Only for technical investigations to other amateurs

May transmit coded messages since it is allowed by the ACMA. But only for testing purposes

Section: 2.

Question: Radio amateurs should announce their call-sign:

at the beginning of the first transmission and then at least every 10 minutes

during silent periods

at the beginning and end of every transmission

at the beginning and end of a series of transmissions

Section: 2.

Question: An urgent situation not involving the safety of life is called:

a distress call

a dire emergency

an urgency call

a security call

Section: 2.

Question: You must give your call-sign:

At least every 10 minutes

Every 20 minutes

At the start and end of every transmission (over)

At the start of every transmission (over)

Section: 2.

Question: Amateurs may relay a message to another amateur on behalf of a friend who is not an amateur:

Within Australia if the message is not of a commercial nature

Commercial third party traffic is allowed within Australia, but not to overseas amateurs

Commercial messages are allowed to overseas countries, if allowed by that country

Third party messages are not allowed under the *Radio-communications Act*

Section: 2.

Question: Under what circumstances can an Amateur Operator transmit outside amateur bands?

To assist with a distress situation

No circumstances

When assisting with a community run event

To make brief tests

Section: 2.

Question: Foundation licence holders are permitted to transmit no more than:

10 watts on SSB

10 watts on any band

5 watts SSB

25 watts on HF

Section: 3.

Question: FM stands for:

Frequency modulation

Fine modulation

Forced modulation

Flat modulation

Section: 3.

Question: A frequency of 30MHz has a wavelength of? You may use this chart if you wish.

(http://vk3kid.org/?page_id=1294)

10 m

20 m

30 m

40 m

Section: 3.

Question: Electric current is:

Movement of electrons from negative to positive

The opposition offered to electrons in a circuit

The voltage applied to a conductor

The rate at which electrical energy is changed to light energy

Section: 3.

Question: Ohms Law:

describes the relationship between current, voltage and resistance in a circuit

is an equation

is used to find the total resistance in a circuit

$I=E/R$

Section: 3.

Question: 1000 volts is often represented as:

1 kV

1 nV

1 MV

1 mV

Section: 3.

Question: Good conductors are:

Copper and Aluminium

Silicon and germanium

Glass and porcelain

Wood and Ceramic

Section: 3.

Question: If 0.5 A flows through a 20 Ohm resistance, the applied voltage is:

10 Volts

40 Volts

0.025 Volts

20.5 Volts

Section: 3.

Question: Resistance is measured in:

Ohms

Volts

Amperes

Watts

Section: 3.

Question: How many KHz are in a MHz?

1000

10

100

1000 000

Section: 3.

Question: Good insulators are:

glass, wood, plastic, porcelain

glass, wood, copper, porcelain

paper, glass, air, aluminum

plastic, rubber, wood, steel

Section: 3.

Question: The prefixes kilo and milli mean:

1000 and 1/1000

one thousandth and one millionth

1/10 and 1/1000

1000 and 1/100

Section: 3.

Question: Resistors are produced in different values and physical sizes.

Generally, the larger the physical size of a resistor the more heat it can dissipate:

True

False

Section: 3.

Question: 10 Volts is applied to a circuit which has a resistance of 100 Ohms.

The amount of current that will flow through the circuit is:

0.1 A or 100 mA

0.01 A or 10 mA

10 mA or .01 A

100 mA or 0.001 A

Section: 3.

Question: 5 Kv is:

5000 volts

0.5 millivolts

50 volts

5/1000 of a volt

Section: 3.

Question: The unit of electrical pressure is the:

Volt

Ampere

Watt

Ohm

Section: 3.

Question: If 10 Volts is applied to a circuit consisting of a resistance of 5 Ohms, the resultant current will be:

2 amp

0.5 amp

15 amp

20 amp

Section: 4.

Question: If a transmitter is over modulated it is likely to:

Cause interference

Get hot

Generate SSB

Generate FM instead of AM

Section: 4.

Question: The ability of a receiver to receive weak signals is called the receivers:

Sensitivity

Selectivity

Stability

Super-heterodyne

Section: 4.

Question: The device that generates the carrier in a transmitter is the:

Oscillator

Audio amplifier

Power supply

Modulator

Section: 4.

Question: Part "B" of the transmitter is called:

The modulator

The oscillator

The audio amplifier

The detector

Section: 4.

Question: in the block diagram of a transmitter as shown below, section "C" is called the:

Power amplifier

Modulator

RF amplifier

Audio amplifier

Section: 4.

Question: Using the diagram of a transmitter, the block marked "D" is called the:

Oscillator

Modulator

Amplifier

ATU

Section: 5.

Question: As a radio wave is radiated from the transmitter it becomes:

Weaker

Stronger

Ionised

Ducted

Section: 5.

Question: In the diagram, which symbol represents an antenna?

7

8

6

3

Section: 5.

Question: The longer the antenna:

The lower the frequency of operation

The higher the frequency of operation

The better the antenna will work

The more vertical polarization will be obtained

Section: 5.

Question: The reason the antenna and transmission line are matched in impedance to the transmitter is to:

Keep SWR to a minimum

Increase the SWR

Eliminate the use of a dummy load

Keep the transmitted power to 10 watts

Section: 5.

Question: The purpose of an antenna is to:

Convert electrical signals into radio waves

Let people know you are a radio amateur

Provide a convenient place for birds to land

Allow balanced transmission lines

Section: 6.

Question: The medium which reflects high frequency radio waves back to the earth's surface is called the:

Ionosphere

Biosphere

Stratosphere

Troposphere

Section: 6.

Question: VHF and UHF signals can be obstructed by:

Large obstacles

Transmission during night time

Strong north winds

Transmission over water

Section: 6.

Question: Radio signals:

Always get weaker with distance

Usually get stronger with distance if they travel via the ionosphere

Always get stronger with distance

Usually get weaker with distance, but it will depend on the sunspot cycle

Section: 6.

Question: Radio waves:

Always travel in a straight line unless diffracted, reflected or refracted

Always travel in a straight line

Never travel in a straight line

Never travel in a straight line unless diffracted, reflected or refracted

Section: 6.

Question: Long distance HF propagation is result of:

Ionospheric refraction

Ground wave

Knife edge diffraction

Tropospheric ducting

Section: 7.

Question: Electromagnetic compatibility means:

Sensitive electronic equipment can work correctly when placed close to other electrical equipment

Sensitive electronic equipment can work correctly within strong magnetic fields

Television receivers will not be effected

Your transmissions will not effect a nearby television set if your transmitter complies with international standards

Section: 7.

Question: Interference resulting from EMC problems may be due to:

- a) output power of the transmitter**
- b) distance of the transmitter from the affected equipment**
- c) frequency used**
- d) type of emission, i.e. SSB, FM, CW, AM**

All of the above

None of the above

a)

a) and b)

Section: 7.

Question: Interference due to a radio transmitter:

Can generally be resolved by using a technical solution

Must be reported to a ACMA radio inspector who will conduct tests to solve the problem

Is invariably due to faulty sensitive electronic equipment

Can be resolved by the use of an RF choke using a ferrite rod or toroid

Section: 7.

Question: Interference from your transmissions can be reduced by:

Reducing the output power from your transmitter

Fitting a mains filter on the 240 V power lead to your transmitter

Following the instructions supplied by the manufacturer of your transmitter

Operating when the ionosphere is high so your signals will not effect nearby electronic equipment

Section: 7.

Question: Interference resulting in EMC problems can be minimised by:

Careful selection and sighting of antennas

Only using dipoles

Using vertically polarised antennas

Only operating from a base station

Section: 7.

Question: One way interference can be fed into nearby electronic equipment is via:

The 240 volt mains

Moist atmosphere

PVC gas pipes

RF chokes wound on toroid's

Section: 7.

Question: EMC problems are dependent on four factors; transmitted power, frequency and type of emission the fourth is:

Distance from the affected equipment

Brand of radio transmitter

Weather

Sun spot cycle

Section: 8.

**Question: A Foundation Licence holder may transmit on a frequency of 7.35 MHz
You may use this LCD page if you wish (http://vk3kid.org/?page_id=590) .**

False

True

Section: 9.

Question: Batteries should be disposed of correctly because of the environmental issues the chemicals in them can cause. Batteries can also:

Explode or emit fumes if punctured

Produce electromagnetic radiation

Go flat very quickly if unused

Make loud noises

Section: 9.

Question: Fuses are placed in circuits to protect against:

High currents

High voltage

High resistance

High frequency

Section: 9.

Question: The correct colour for the earth wire in a flexible mains lead is:

Yellow and green

Brown

Green

White

Section: 9

Question: You can safely remove an unconscious person from contact with a high voltage source by:

Turning off the high voltage and then removing the person

Pulling an arm or a leg

Calling an electrician

Wrapping the person in a blanket and pulling to a safe area

Section: 9

Question: Mains operated equipment may use an earth wire connection which:

Is a green and yellow wire

For fixed wiring (as used for 240 V house wiring) has a green and yellow wire, while flexible cords always have a plain green wire

The earth wire colour will depend where the equipment was manufactured

Is a green and yellow wire which must always be connected to the station earth which should be placed as near to the transmitter as possible

Section: 9

Question: The fuse melts (blows) on your power supply:

You must replace the fuse with another of the same current rating

You can try a fuse that is slightly larger in size to prevent it failing again, providing your power supply can supply the extra current

You must not replace the fuse! Only a qualified person (such as an electrician) can replace fuses

It is safest if you replace it with a fuse which is slightly smaller in value

Section: 9

**Question: A person has received an electric shock.
You should immediately:**

Switch the power off

Phone for an ambulance

Turn them onto their side, check their breathing and circulation. Commence CPR if a pulse is not present

Phone for an ambulance and then check their breathing and circulation

Question: Protective mains earth:

Can only be removed or replaced by qualified persons

Should be removed during fault finding

Are not necessary in amateur radio stations

Are always represented by a purple wire

"Only a club can give you on going support once you got your License"

Last update 16/05/2013

Sherbrooke Community Radio Club Inc "VK3KID"

Established 2007

Return to foundation page (http://vk3kid.org/?page_id=40)

(<http://vk3kid.org/vk3kid.org>)

Home page. (<http://vk3kid.org>)

(<http://vk3kid.org/vk3kid.org>)

