



1. The Regional Secondary Locator W in the prefix of an amateur call sign, if used, refers to
- 1A2.2758
- A. Northern Ireland.
 - B. England.
 - C. Wales.
 - D. Scotland.
2. To correctly identify your station in accordance with your Licence you MUST state
- 1A4.4045
- A. the callsign of the station you are in contact with and your Callsign.
 - B. your Callsign in voice or the mode of transmission you are using.
 - C. your name and the callsign of the station you are using.
 - D. your Callsign and then the Callsign of the station you are in contact with.
3. Apart from a CQ call the amateur licence does not permit
- 1C1.3359
- A. talking about a programme heard on the BBC.
 - B. transmitting to anybody who happens to be listening.
 - C. allowing other people to overhear your transmissions.
 - D. transmitting to more than one person.
4. If you are required to keep a log of your transmissions, the items you need to record are
- 1D2.2191
- A. whatever you consider appropriate to record.
 - B. the dates and times of any alleged interference.
 - C. whatever the complainant asked you to record.
 - D. whatever an Ofcom official has asked you to record.
5. What is the radiated power level above which an EMF (electromagnetic field) assessment must be carried out?
- 1G1.8044
- A. 1W EIRP
 - B. 1W ERP
 - C. 10W EIRP
 - D. 10W ERP



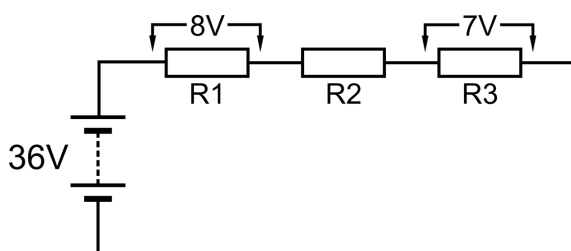
6. What is the status of UK amateur satellite service on 430.5MHz?

1H1.7528

- A. Not allocated.
- B. Primary.
- C. Primary shared.
- D. Secondary.

7. What is the voltage across R2 in the circuit shown?

2C2.7717.3



- A. 21A
- B. 20A
- C. 20V
- D. 21V.

8. The unit of frequency is the

2E1.4494.1

- A. hertz
- B. amp
- C. watt
- D. volt.

9. A diagram of the electronics of a handheld radio has a device labelled 'DAC'. It is likely that this device

2F2.7720.2

- A. takes the digital signal from the radio's memory and amplifies it to a suitable level for headphones
- B. processes the data stream into regular samples suitable for storing in the radio's memory
- C. catalogues the data signals and produces a display of the frequency the radio is tuned to
- D. takes a digital signal from the radio's memory and turns it into an analogue signal.



10. When an audio frequency is mixed with a radio frequency, which one of the following is produced?

3A3.4589.1

- A. Carrier wave
- B. A direct current
- C. Harmonics
- D. Sidebands.

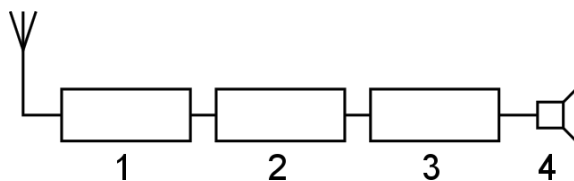
11. A poorly designed frequency generator stage in a transmitter may

3C1.4634.1

- A. risk damaging the antenna
- B. damage the power supply
- C. cause the transmitter to radiate outside the amateur bands
- D. risk damage to the audio stage or the microphone.

12. In the block diagram of a radio receiver shown, what is the function of the box marked '1'?

3H2.4687.1



- A. Tuning and RF amplifier
- B. Detection
- C. Antenna
- D. Audio amplifier.

13. The device used to correctly connect a dipole antenna to coaxial feeder is called

4B1.4724.1

- A. a dummy load
- B. a balun
- C. an SWR meter
- D. a yagi.

14. An antenna will

4C1.4731.1

- A. pick up radio signals and convert them into electrical signals
- B. provide an RF earth
- C. work equally well at all frequencies
- D. reflect radio waves away from the transmitter.



- 15.** Damage to an antenna will be most evident inside the station on the
- 4E2.4807.1
- A.** transmitter frequency display
 - B.** transmitter output meter
 - C.** standing wave ratio meter
 - D.** power supply voltmeter.
- 16.** The ionosphere is located at heights above the ground between
- 5B1.4849.1
- A.** 7m and 40m
 - B.** 7km and 40km
 - C.** 70ft and 400ft
 - D.** 70km and 400km.
- 17.** A radio amateur wishes to receive from a greater range on VHF and UHF. Which option is likely to be most successful?
- 5C3.4892.1
- A.** Place the antenna on the ground in the garden
 - B.** Use UHF for greatest range
 - C.** Increase the antenna height to above surrounding roofs
 - D.** Double the receiving station's transmitter power.
- 18.** A radio amateur is operating on 145.5MHz. Which of the items in the 'shack' is most likely to suffer interference?
- 6A4.4910.1
- A.** An HF receiver on 14.1MHz
 - B.** An electric digital clock
 - C.** A computer
 - D.** A VHF receiver on 144.25MHz.
- 19.** Clicks and a buzz on a mobile receiver in a vehicle can be due to
- 6F3.4974.1
- A.** locating the antenna in an exposed location on the roof
 - B.** the use of battery power rather than mains power
 - C.** battery charging and vehicle ignition systems
 - D.** the lack of an actual earth lead to divert the electrical noise.



- 20.** The Station Log will be of assistance in tracing the cause of an interference problem experienced by a neighbour, because
- 6G2.4986.1
- A.** the licence requires you to keep a Log of your transmissions
 - B.** the station you contacted might be the source of the interference
 - C.** it will be useful to compare the times of the interference with the times of transmission
 - D.** the local authority will want a copy of your Log in order to deal with the complaint.
- 21.** When you are calling "CQ" on 145.500MHz and another station replies you should
- 7A3.3140
- A.** remain on this frequency.
 - B.** state your name and location.
 - C.** exchange signal reports.
 - D.** arrange to move to a clear channel.
- 22.** Operating just above the 2 metre amateur band (144.0-146.0MHz) is not legal and may interfere with
- 7B2.3044
- A.** broadcasting.
 - B.** radio astronomy
 - C.** space operations
 - D.** mobile (except aeronautical mobile).
- 23.** When borrowing or lending a digital voice (DV) radio you must
- 7F1.8026
- A.** use the original owners callsign but say who is actually using the radio.
 - B.** re-register the radio with the RSGB or local digital repeater group.
 - C.** ensure the embedded digital callsign is changed to the callsign of the actual user.
 - D.** remember to give your callsign in voice to override the embedded details.
- 24.** When checking mains equipment, it is necessary to
- 8A6.5126.1
- A.** use only non magnetic tools
 - B.** disconnect the unit from the mains supply
 - C.** remove the earth wire from the mains plug
 - D.** remove the earth wire from the equipment.



25. When using a ladder to erect a new antenna you should

8C2.5179.1

- A.** only use a wooden ladder
- B.** ensure that you are the only person in the area
- C.** set the ladder at the correct angle (1 up to 4 out)
- D.** set the ladder at the correct angle (4 up to 1 out).

26. The ICNIRP is of interest to amateurs because it

8D2.5206.1

- A.** produces guidance on the safe levels of RF exposure
- B.** co-ordinates the launch of amateur and other satellites
- C.** produces the International version of the Amateur Band Plans
- D.** oversees the preparation of the International Radio Regulations.



Answers FOUNDATION MOCK PAPER 2

Question	Answer	Question	Answer
1	C	14	A
2	B	15	C
3	B	16	D
4	D	17	C
5	C	18	D
6	A	19	C
7	D	20	C
8	A	21	D
9	D	22	D
10	D	23	C
11	C	24	B
12	A	25	D
13	B	26	A