



- 1.** An Amateur Radio Licensee may use the Station for
- 1A1.2754
- A.** Self-training in communication by wireless telegraphy.
 - B.** Broadcasting messages for reception by un-licenced listeners.
 - C.** The Licensee's personal business interests.
 - D.** Transmitting recorded music for reception by institutions such as hospitals.
- 2.** To correctly identify your station in accordance with your licence you **MUST** state
- 1A4.4045
- A.** your name and the Callsign of the station you are using.
 - B.** your Callsign and then the Callsign of the station you are in contact with.
 - C.** your Callsign in voice or the mode of transmission you are using.
 - D.** the Callsign of the station you are in contact with and then your Callsign.
- 3.** A member of a User Service wishes to pass a message using your radio equipment to support operations.
- 1B1.7506
- A.** That is only acceptable in times of emergency.
 - B.** That is not acceptable unless the member is a licenced amateur.
 - C.** That is not acceptable.
 - D.** That is acceptable.
- 4.** The holder of an Amateur Radio Licence may be told to close down and cease to operate the station when
- 1D1.3218
- A.** the station has not been on the air for 6 months.
 - B.** the station has not been on the air for 3 months.
 - C.** operation has only been mobile.
 - D.** the licensee is in breach of the licence.
- 5.** The EMF requirements in the amateur licence are there to
- 1G1.7974
- A.** limit the exposure of people to RF radiation.
 - B.** avoid other electronic equipment suffering interference.
 - C.** set the permitted power limits at each licence level.
 - D.** minimise RF pickup in overheard telephone wires.



6. Which amateur band shown is allocated on a Primary basis with the condition of non-interference to other services outside the UK?

1H1.4027

- A. 1.85 – 2.00MHz.
- B. 3.50 – 3.80MHz.
- C. 0.1357 – 0.1378MHz.
- D. 1.81 – 1.83MHz.

7. Which one of the following is an electrical insulator?

2A1.4373.1

- A. Copper
- B. Gold
- C. Silver
- D. Ceramic.

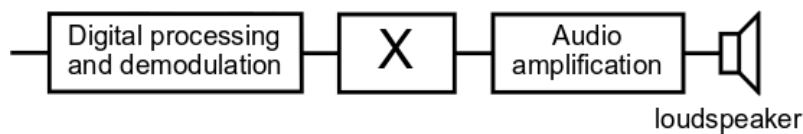
8. What wavelength corresponds to the 14MHz band?

2E7.4554.1

- A. 50 metres
- B. 20 metres
- C. 0.6 metres
- D. 40 metres.

9. The block diagram shows part of a radio receiver which uses digital processing to demodulate the radio signals. What is the function of the box marked 'X'?

2F2.7382.6



- A. Digital to analogue converter
- B. Analogue to digital converter
- C. Frequency demodulator stage
- D. Amplitude demodulator stage.

10. Modulation is the process of

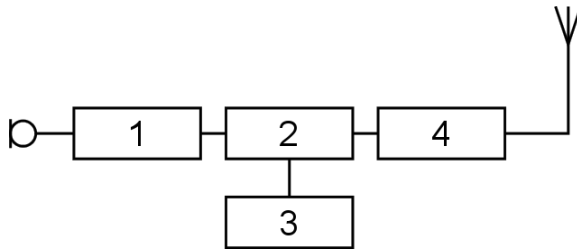
3A1.4571.1

- A. ensuring the transmitter is on the same frequency as the distant receiver
- B. adding the data or voice to be transmitted to the radio frequency carrier
- C. extracting the transmitted data from the radio frequency carrier
- D. ensuring the transmitter is on the same frequency as the local receiver.



11. What is the function of the box marked '3' on the transmitter block diagram?

3B1.4627.1



- A. Modulator
- B. Audio amplifier
- C. RF power amplifier
- D. Oscillator.

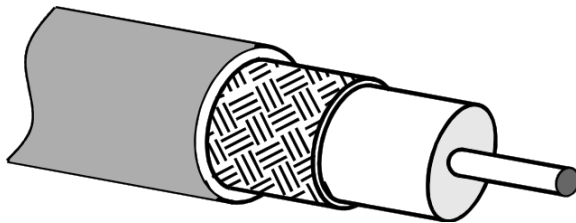
12. In a software defined radio (SDR) receiver the required signal is selected using

3M1.4709.1

- A. A low pass filter
- B. An anti-alias filter
- C. A filter defined in software
- D. A diode detector.

13. The cable shown in the drawing is normally used for

4A1.4716.1



- A. carrying mains power
- B. outdoor lighting
- C. radio frequency signals
- D. low voltage DC devices.

14. 10W EIRP is the same radiating power as

4C4.8014

- A. 6.1W ERP.
- B. 6.1W PEP.
- C. 10W ERP.
- D. 10W PEP.



- 15.** Which type of cable is fitted to a PL259 plug?
4G1.4823.3
- A.** Two core AC mains
 - B.** 300Ω ribbon
 - C.** Three core AC mains
 - D.** 50Ω coaxial.
- 16.** The layers of conductive gases between 70 and 400km in height are known as the
5B1.4853.1
- A.** troposphere
 - B.** solarsphere
 - C.** ionosphere
 - D.** mesosphere.
- 17.** Which action will be most effective in extending the range for transmitting and receiving VHF or UHF signals?
5C3.7730.2
- A.** Increasing the height of the antenna
 - B.** Using UHF rather than VHF
 - C.** Using an indoor antenna
 - D.** Increasing the transmitter power.
- 18.** Which item is most likely to be affected by a local radio transmission?
6A4.4909.1
- A.** An electric bell
 - B.** An electronic calculator
 - C.** A domestic radio receiver
 - D.** An electric fire.
- 19.** Amateur transmissions might be picked up by
6C1.4932.1
- A.** only wiring that does not have an earth lead
 - B.** only wiring which is longer than 2 metres
 - C.** earth leads only
 - D.** any nearby electrical wiring.



- 20.** It is proving difficult to determine how an amateur transmission is interfering with a neighbour's television. The amateur should try seeking help from the
- 6G1.5000.3
- A. Radio Society of Great Britain
 - B. British Telecommunications
 - C. Planning Department of the local council
 - D. Radio Licensing Centre.
- 21.** The main reason for listening on the frequency before making a CQ call or starting a conversation is
- 7A1.4069
- A. because the station you are calling might be calling you.
 - B. to make sure the station you are contacting is listening on that frequency.
 - C. to allow your transmitter to settle properly on the chosen frequency.
 - D. to ensure your transmission will not upset other transmissions.
- 22.** According to the 'Band Plan' what is the 2 metre band FM calling frequency?
- 7B1.3004
- A. 144.500MHz
 - B. 144.300MHz
 - C. 145.500MHz
 - D. 144.700MHz.
- 23.** Getting an amateur friend to comment on your transmitted audio signal when you are using a new microphone is necessary because
- 7D1.3109
- A. the tone controls might need adjusting.
 - B. the microphone could be tuned to the wrong frequency
 - C. not all microphones are suitably fused
 - D. the microphone gain on the transmitter may need to be re-adjusted.
- 24.** A fuse is formed from
- 8A4.6271.3
- A. a coil of wire
 - B. a metal strip designed to melt at a specific current
 - C. a junction of two different types of silicon material
 - D. two metal plates separated by an insulator.



25. Protective goggles should be worn when drilling in order to

8B1.5150.1

- A.** hold glasses (if worn) securely
- B.** allow closer inspection of the work
- C.** prevent swarf entering your eyes
- D.** allow greater drill speeds.

26. At an open day hosted by your radio club who is responsible for the safety of those attending?

8F5.5248.1

- A.** Everybody present
- B.** The RSGB
- C.** Ofcom
- D.** The police.



Answers FOUNDATION MOCK PAPER 1

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