



Syllabus 2019 – Mock Examination Paper

Foundation Mock paper 2

- 1** Which, of the items listed below, is NOT a type of Amateur licence?
1A1, 1A2,
1A3, 1A4
- A. Intermediate.
 - B. Foundation.
 - C. Beginner.
 - D. Full.
- 2** When transmitting, you must give your call sign
1A5
- A. when establishing contact and at least every 5 minutes.
 - B. when establishing contact and as frequently as is practicable.
 - C. during CQ calls and at the beginning and end of the contact
 - D. at the beginning and end of the contact.
- 3** You are talking to M3ABC by amateur radio and friends enter his room. You may also address remarks to these friends
1B1, 1C1,
1C2, 1C3
- A. if they are family members.
 - B. if M3ABC gives permission.
 - C. if they are also amateurs.
 - D. but only on the calling channel.
- 4** When must you carry out tests on your station to ensure that it is not causing undue interference to other radio users?
1D1, 1D2,
1F1
- A. If you receive a complaint from a neighbour.
 - B. From time to time.
 - C. Every week.
 - D. When the warranty expires on your transceiver.
- 5** On which one of the frequencies below may a Foundation licensee transmit?
1G1
- A. 1.825MHz.
 - B. 7.5MHz.
 - C. 15MHz.
 - D. 21.5MHz.

- 6** Which part of an amateur band is not permitted within 100km of Charing Cross, London?
1G2
- A. 1.810-1.830MHz.
 - B. 51.00-52.00MHz.
 - C. 431.0-432.0MHz.
 - D. 438.0-440.0MHz.
- 7** Which of the following is a good conductor of an electric current?
2A1, 2A2,
2B1, 2C1,
2C2, 2C3,
2C4
- A. Rubber.
 - B. Plastic.
 - C. Glass.
 - D. Aluminium.
- 8** The frequency 50MHz is
2E1, 2E2,
2E7, 2J1
- A. LF.
 - B. HF.
 - C. VHF.
 - D. UHF.
- 9** An Analogue to Digital converter ADC
2F1, 2F2
- A. Represents a digital signal in analogue format.
 - B. Samples an analogue signal and creates a digital representation of it.
 - C. Modulates the audio input.
 - D. Is an optional component in a software defined radio.
- 10** When radio frequencies are mixed with audio frequencies, the new frequencies that are generated are called
3A1, 3A2,
3A3, 3A4
- A. Fundamentals
 - B. Harmonics
 - C. Sidebands
 - D. Carriers
- 11** The RF power amplifier
23B1, 3C1,
3E1, 3F1,
3F3, 3G1
- A. takes the signal from the microphone and amplifies it to a suitable level.
 - B. amplifies the modulated signal to suitable level to feed the antenna.
 - C. converts the mains supply to a suitable voltage to be used by the transmitter.
 - D. ensures the transmitter is radiating on the correct frequency.

- 12** In a Software Defined Radio, demodulation is carried out by a
3H1, 3H2,
3K1, 3M1
- A. product detector.
 - B. frequency discriminator
 - C. balanced modulator.
 - D. mathematical process.
- 13** Loss in feeders increases with the
4A1, 4A2,
4B1
- A. transmit power.
 - B. length of the feeder cable.
 - C. lower transmit frequencies.
 - D. higher gain antennas.
- 14** The gain of an antenna is measured in
4C1, 4C2,
4C3, 4C4,
4C5, 4D1
- A. Watts.
 - B. Volts.
 - C. Amps.
 - D. Decibels.
- 15** An amateur changes the frequency band he/she is operating on but does not check if the antenna is still matched. This might cause
4E1, 4E2,
4F1, 4G1,
4H1
- A.* damage to the transmitter.
 - B. distortion of the transmitted signal.
 - C. antenna overloading.
 - D. Interference to be caused on other bands.
- 16** The lowest layer of the ionosphere is at a height of about
5A1, 5A2,
5B1, 5B2
- A. 800km.
 - B. 700m.
 - C. 70km.
 - D. 10km.

- 17** Snow, ice and rain have the most detrimental effect on which frequency range?
5C1, 5C2, 5C3
- A. LF.
 - B. HF.
 - C. VHF.
 - D. UHF.
- 18** Electromagnetic compatibility (EMC) means
6A1, 6A2, 6A3, 6A4
- A. The antenna is properly matched to the transmitter.
 - B. the avoidance of interference between electronic equipment.
 - C. ensuring electronic equipment generates small electromagnetic fields.
 - D. a microphone will work correctly when connected to a transmitter.
- 19** When installing a transceiver in a motor vehicle care must be taken to ensure
6B1, 6C1, 6D1, 6D4, 6E1, 6E2, 6F1, 6F2, 6F3
- A. The antenna is mounted as far away from the fuel filler as possible.
 - B. The system will not interfere with vehicle electrical and management systems.
 - C. You insure the equipment against theft.
 - D. The transceivers controls cannot be changed whilst the car is moving.
- 20** Advice on dealing with EMC and interference is available from
6G1, 6G2, 6G3
- A. the local council.
 - B. the Police.
 - C. the Radio Society of Great Britain.
 - D. the Citizens Advice Bureaux.
- 21** The correct phonetic spelling of 'SIGNAL' is
7A1, 7A2, 7A3, 7A4, 7A5, 7A6
- A. SIERRA ITALY GOLF NOVEMBER APPLE LIMA.
 - B. SIERRA ITALY GOLF NORWAY ALPHA LIMA.
 - C. SIERRA INDIA GOLF NOVEMBER ALPHA LIMA.
 - D. SUGAR INDIA GOLF NOVEMBER ALPHA LIMA.
- 22** A badly setup transmitter operating on 50.1 MHz is also radiating on 150.3MHz. Which service might be affected?
7B1, 7B2, 7C1
- A. Broadcast Radio.
 - B. Aeronautical mobile.
 - C. Radio Astronomy.
 - D. Maritime Mobile.

- 23**
7D1, 7E2,
7F1, 7F2,
7G1
- You are having a contact (QSO) with another amateur and he reports your signal as '5 and 5'. This means that he is reading your transmission as
- A. excellent audio and very strong signal strength.
 - B. average audio and a very strong signal strength.
 - C. excellent audio with an average signal strength.
 - D. average audio with an average signal strength.
- 24**
8A1, 8A2,
8A3, 8A4,
8A5, 8A6,
8A7, 8A8
- A Residual Current Circuit Breaker with Overcurrent Protection (RCBO) will stop mains power in a circuit
- A. only when there is a current leakage to earth above its leakage threshold.
 - B. only when there is an excessive current in the circuit above the current threshold.
 - C. when there is both earth leakage and excessive current above the device threshold.
 - D. when there is either earth leakage or excessive current above the device threshold.
- 25**
8B1, 8B2,
8B7, 8C1,
8C2, 8C3
- Soldering workstations
- A. require an emergency cut off switch in case the soldering tip comes into contact with the skin.
 - B. should be well ventilated to avoid inhaling fumes.
 - C. must be on an anti-static surface.
 - D. must be earthed.
- 26**
8D1, 8D2,
8D3, 8D4,
8E1, 8F1,
8F2, 8F3,
8F4, 8F5
- Using excessive volume when wearing headphones can result in
- A. complaints from neighbours about the noise.
 - B. damage to your transmitter.
 - C. overloading your receiver.
 - D. damage to your hearing.

Answer key

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