

PRACTICE

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Try your hand at the Ham Radio Today RAE practice papers. Using our special facilities, we have provided questions which very closely parallel those set by the City and Guilds Institute.

The full exam requires the candidate to answer 95 questions in three hours. The 25 questions given here should be completed in about 50 minutes.

- 1) A mobile station must enter in his log book the following information:
 - a) the date, area of operation, frequency band(s) used, times of establishing and ending contact with each station.
 - b) the date, area of operation, frequency band(s) used, times of establishing and ending contact with each station including all CQ calls.
 - c) the date, frequency band(s) used, time of commencement and end of journey.
 - d) the date, area of operation, frequency band(s) used, time of commencement and end of journey.
- 2) The apparatus at the station shall be designed so that:
 - a) the levels of spurious emissions shall be at least 20dB below the fundamental frequency.
 - b) it is capable of receiving messages sent on the frequency or frequencies, and in the same class or classes of emission, which are in current use at the station for the purpose of sending.
 - c) the operator may continuously monitor the transmission.
 - d) the levels of spurious emission be less than 5V when measured with a good quality oscilloscope.
- 3) The Secretary of State may vary the terms, limitations or provisions of amateurs licences A and B by placing a general notice:
 - a) in the London, Edinburgh and Belfast Gazettes.
 - b) in a newspaper published in London, Manchester, Edinburgh and Belfast.
 - c) in the London, Edinburgh, Cardiff and Belfast Gazettes.
 - d) in a newspaper published in London, Edinburgh, Cardiff and Belfast.
- 4) The licensee with callsign G12JKL must not sign himself:
 - a) G2JKL/A when at a temporary location in England.
 - b) G12JKL/M when driving his car in Wales.
 - c) GM2JKL/M when driving his car in Scotland.
 - d) G12JKL/A when at a temporary location in Ireland.

- 5) The maximum carrier power supplied to the antenna of an amateur 1.81-2.00MHz transmitter is limited to:
 - a) 32W (15dBW)
 - b) 400W (26dBW)
 - c) 40W (16dBW)
 - d) 8W (9dBW)
- 6) The symbol J3E is applied to classes of transmission to mean:
 - a) amplitude modulated, telephony, single sideband, reduced carrier.
 - b) frequency modulated telephony.
 - c) amplitude modulated, telephony, single sideband, suppressed carrier.
 - d) frequency modulated facsimile transmission.
- 7) Drift in frequency must be avoided to ensure:
 - a) the transmission frequency does not interfere with users on adjacent frequencies and go outside the amateur band.
 - b) the transmission can be received by the listening station.
 - c) the transmission frequency does not go outside the amateur band.
 - d) the transmission frequency remains absolutely constant.
- 8) "Splatter" on an amplitude modulated transmission (telephony) could be caused by:
 - a) excessive bandwidth.
 - b) a very high power of transmission.
 - c) not using directional aeriels.
 - d) talking too close to the microphone.
- 9) Poor design of an HF transmitter could cause VHF or UHF oscillations due to:
 - a) the natural tendency of transistors or valves to oscillate at these frequencies.
 - b) stray inductance and capacitance causing resonance at these frequencies.
 - c) the use of both transistors and valves in one unit.
 - d) the choice of an active device with a too high cut-off frequency.

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