



## Report on multiple-choice Question Paper

Paper: 7730-001 Novice Radio Amateurs Examination

Examination date: 11 September 2000

Syllabus Topic or Objective	Number of items	Comments on performance of candidates
1 Receivers and receiving techniques	5	All the questions in this section were very well answered by most of the candidates.
2 Components, applications and units	3	<p>Fewer than one third of the candidates answered correctly a question about the value of capacitors. Most candidates thought that 0.0001<math>\mu</math>F and 1nF were smaller than 10pF.</p> <p>26% of those taking the examination thought that a tuned circuit was required to operate as a detector in a receiver.</p>
3 Measurements	4	A question about measuring the input power of a transmitter was not well answered; 39% of the candidates <i>divided</i> the applied voltage by the current in order to calculate the input power to the power amplifier.
4 Propagation and antennas	5	Most questions were well answered but there was some difficulty with one question, 45% of candidates thinking that the feeders to all antennas should be of coaxial construction.
5 Transmitters and transmitting techniques	10	In one question, only 41% of the candidates recognised a crystal controlled oscillator as producing the most stable transmitted signal. 52% thought that the most stable signal would be produced by a b.f.o. or v.f.o. The other nine questions in this section were very well answered.
6 Operating techniques	6	<p>Three questions on operating techniques were not well answered.</p> <p>26% of the candidates thought that the transmitter power need not be recorded in the novice station log book.</p> <p>The abbreviation DE, when sent in Morse, was correctly recognised by 51% of candidates to be used prior to giving ones own call sign. 29% thought it was the break sign.</p> <p>Again, when confronted on the air by an unidentified intruder using abusive language, 48% of candidates said they would tell the intruder that he would be reported to the Radiocommunications Agency. 52% of the candidates correctly chose to disregard the intruder and continue their contact.</p>

continued overleaf

Syllabus Topic or Objective	Number of items	Comments on performance of candidates
<p>continued</p> <p>7 Station layout</p> <p>8 Construction</p> <p>9 Safety</p> <p>10 Licensing conditions</p>	<p>1</p> <p>1</p> <p>2</p> <p>7</p>	<p>This question was well answered by most candidates.</p> <p>Only one third of the candidates answered correctly the reason for tinning the tip of a soldering iron.</p> <p>Both the questions on safety were well answered by most candidates.</p> <p>Candidates had a good understanding of the conditions for the Licence. All the questions in this section were very well answered.</p>
<p>General comments on the paper</p>	<p>One question on the Amateur Radio Licence Schedule was excluded from the scoring as there was no possible answer among the options given. The paper was therefore marked out of a total of 44.</p> <p>Candidates were generally well prepared for the examination. Despite the disappointing number of entries, the detailed analysis showed that of the 72 candidates, 62 (86%) of them were successful.</p> <p>The next examination in this subject is scheduled to take place at approved centres on Monday, 11 December 2000. The City and Guilds fee for the examination is £13.05.</p> <p>Reports for the Radio Amateurs Examination (7650) and the Novice Radio Amateurs Examination (7730) are normally available on the Internet about three weeks after the date of each examination at</p> <p style="text-align: center;"><a href="http://www.g4dmp.co.uk/">http://www.g4dmp.co.uk/</a>.</p>	