COMPUTING

| Paper 9691/01 |
| Written Paper 1 |

General comments

The paper worked well at discriminating between candidates of differing abilities. All questions attracted the full range of marks available, so no marks were inaccessible to all candidates.

The questions appeared to be fair and were unambiguously worded. There were questions, notably 3 and 9, where candidates wrote down everything that they knew on the topic and then found themselves in the uncomfortable position of having nothing to say in later parts.

The use of proprietary brand names, particularly for software suggestions is beginning to creep back into responses and should be stopped. Examiners do not penalise this except to the extent that such responses are not worthy of credit. On a similar tack, there were many candidates who failed to answer much of the second half of the paper within the context of the oil exploration scenario. Hospitals, banks and even chess playing were used as examples rather than the scenario given and could not gain the marks available. Centres have to use example applications in their teaching but candidates should be aware that other scenarios exist which are sensible and that the scenario used in the examination paper is unlikely to be the one that was used when they were being taught.

Some candidates appeared to run out of time although it is possibly a failure to be able to respond to the later questions rather than lack of time. Some candidates spent too long attempting the algorithm question and this made them short of time towards the end of the paper. It is important that candidates understand that some of the skill in sitting an exam paper is exam technique and these candidates were demonstrating a distinct lack of that technique. The advice with the algorithm question is that it really should be attempted at the end of the examination, or the candidate should restrict themselves to the extra half hour that was the time which was allocated to the question when it was introduced in the revised format of the syllabus.

Comments on specific questions

Question 1

(a) Mainly well answered. Some candidates simply said that a form-based computer interface has a form. This is obviously not worthy of credit and candidates should beware of simply copying the question down as the answer. A full set of acceptable responses is available to Centres in the published mark scheme to which their attention is drawn.

(b) Too many 'drawing' applications were given without a justification. The form-based application was better answered despite the fact that it is actually the more difficult one.

(c) The question asked for the hardware and software of the HCI, not of the entire computer system. When considered in context there is only one acceptable response for each.

Question 2

(a) Well answered, though a significant number failed to add the leading 0 and some candidates put the 0 at the wrong end of the number.

(b) The question was clearly about stock control in a warehouse. It had nothing to do with POS or prices or sell by dates. Whilst some of the marks were available if a candidate answered in this way, they had not read or answered the question as printed on the question paper.

Question 3

(a) Well answered, although a single line of answer was all that was expected some answers went on for half a page.

(b) Many candidates do not realise that programs/OS are data.

(c) Software is not stored on ROM so that it is on there when the power is off. It is stored on ROM so that it is there when the power is switched on. These are two very different things!

The second part of this was considered the hardest question on the paper. The answer relies on candidates understanding that instructions can be given to the washing machine and that the processor cannot use ROM only RAM.

Question 4

(a) Well answered.

(b) Many described the entire systems life cycle. Others described as many information collection methods that they could think of. These responses did not answer the question. Very few mentioned the other elements of the analysis stage.

Question 5

Well answered.

Question 6

Very poorly answered. The algorithm question on this paper was intended to be more difficult and so it proved. Very few were able to demonstrate an ability to use the basic structures of language that are expected by the syllabus and most were content to either use IF (both wrongly and with the incorrect structure for the statement) or to copy down the question or to use long wordy prose statements. The Examiners are not looking for perfection, this is a difficult question, but they did expect some type of recognisable algorithm from the candidate.

Question 7

(a) Quality of answers was very much Centre based. Either almost all the candidates got 5 or 6 marks or they got very few, largely, one suspects, by accident.

(b) Candidates must read the whole question including the scenario. This one clearly describes the oil exploration scenario. It also states that the rest of the questions refer to this information, hence it is important to relate this answer to the scenario given, not to medical diagnosis.

Question 8

(a) Answers were very poor. The answers just gave the normal hardware for a computer system. This question must be answered in terms of the data collected at the survey site and then sent to head office. There is nothing in here about any processing at the site or communications from head office or the need for electronic mail. In essence this is a data logging example.

(b) The plotter was poorly answered probably because it was out of the experience of most of the candidates. The second part is a standard question on output formats, straight out of the syllabus, yet it was poorly answered. Candidates who read the scenario were even given 'numeric' in the stem.

Question 9

The responses to **(a)** and **(b)** were confused. Again, this is lack of exam technique. The first part asked for basic definitions of the processes while the second referred to context. The backing up of data is not done by the company in case the head office burned down, it is done because the data is valuable, because it would cost too much to do all the site surveys again, and so on. The answer must be in relation to the question.

Question 10

(a) The scenario told candidates that the data was numeric, so candidates should have used this in their answer. Many did not.

(b) Well answered by many.

Question 11

(a) For students who were aware of parity checking this was an easy 4 marks.

(b) Very poorly answered. Most candidates talked of check digits or of adding the bits. This whole area of error checking techniques is a relatively simple part of the syllabus but is very poorly answered.