Examiners' Report November 2008

IGCSE ICT (4385)

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Contents

IGCSE ICT 4385

Principal Examiner's Report: November 2008

Paper 1F

General Comments

There were only 15 candidates entered for the November session, this makes any formative judgements relating to candidates responses a difficult task.

Candidates' answers from all centres were generally weak and were not full enough to maximise marks available.

Report on Candidates' Responses

Q1 (a) Good responses from all candidates with most gaining full marks.
(b) The majority of candidates gained one of the available three marks. Candidate rightly stated an icon was a picture but most failed to go on and say how the icon could be used to access software.

Q2 (a)(i)(ii) Candidates correctly identified a field and record from the database supplied.
(iii) Few candidates correctly identified the key field.
(b)(i)(ii) Good answers relating to data being added and removed from the database.
(iii) Few candidates could give an adequate reason for amending a data base record. Many confused it with deletion.
(c) Very poorly answered, only one candidate was able to give suitable checks that were correct and related to the given database fields.

Q3 (a) Poor answers by most candidates, one candidate gained the full 4 marks available, most gained one or two of the available four marks and these were for e-mail use and the search engine.
(b) Very poorly answered by all candidates indicating that they were not aware of nature of information placed on web sites.

Q4 (a) Poorly answered by all candidates. (b) Again candidates were not able to give answers in sufficient depth to gain any credit. In general they appeared not to know any details of the attributes of network cable technology. (c) The better candidates could name a device to join the two networks but none could give a suitable reason for using it.

Q5 (a) Poor responses by all candidates, they were all unable to give suitable examples of typical, extreme and invalid data.
(b) The better candidates gained one of the available four marks by suggesting a spell check could be run - no reasons were given for running this test.

Q6 (a) Poor responses were given by most candidates. Only one candidate correctly gave the program steps required to move the robot.
(b) Poorly answered by all candidates.

Q7 (a) Good answers by most candidates gaining the two marks available here.
(b) A few candidates gained two out of the available six marks for recognising a capital letter was obtained by using the shift key, otherwise this question was very poorly answered.

Q8 (a) One candidate gained a mark for attempting to draw a data collection form. Answers given in (b) indicate that candidates at this level still do not understand the purpose of encoding data. No suitable examples were offered by candidates

Q9 (a) One candidate gained one of the available two marks for this question, but in general answers were poor and not related to the question.
(b) No candidates could explain how the diary could be kept secret. In (c) no candidates responses were acceptable. The candidates appeared not to know how a wireless computer systems operate and what security features were required.

Q10 (a)(b)(c) Foundation tier candidates found this a very difficult question. They were not able to relate to the control features being utilised in this scenario. In d(i) one candidate was able to give a suitable item of data collected. In d(ii) the majority of candidates recognised a spreadsheet was required but none of them could give a suitable reason for using it.

Q11 (a) Foundation tier candidates were not able to give the advantages of commercial software in comparison to using HTML. In (b) no candidate responded suitable to this question relating to picture resizing.

Q12 (a) (i) One candidate gave a suitable explanation for a 'bit'. In (a)ii) (iii) no candidate could explain a Byte and those that attempted the kilobyte thought it contained 1000 bits.
(b) (c) No foundation tier candidate attempted this question.

IGCSE ICT 4385

Principal Examiner's Report: November 2008

Paper 2H

General Comments

There were only 58 candidates entered for the November session, this makes any formative judgements relating to candidates responses a difficult task. One centre however submitted work of a very high standard which is encouraging to see.

Report on Candidates' Responses

Q1 (a) Good answers from all candidates gaining the full two marks available.
(b) Most candidates gained four out of the available six marks relating to second functions on the keyboard.

Q2 (a) Some good data entry forms were produced. A few candidate lost marks by adding computer screen features to their forms.
(b) Good examples were given of suitable subject codes.

Q3 (a) Most candidates on the higher tier were familiar with methods of restricting access to Internet sites.
(b) The majority of candidates again gave suitable methods for restricting access to computer files.
(c) candidates proved they were aware of the limitations of wireless network security. Most gained two of the available three marks.

Q4 (a) Most of the better candidates could describe a suitable mechanism for counting people through the turnstile.
(b)(i)(ii) Only the better candidates gave the required and in the context of visitors entering and leaving the area.
(c) Few candidates realised the arithmetic process required to give the customer count.
(d)(i)(ii) Good answers given by the majority of candidates. Candidates were very familiar with this aspect of data logging.

Q5 (a) Good answers by most candidates gaining the three marks available for this question related to Internet software packages.
(b) Only the better candidates were able to explain the full process required to speed up the process of uploading images.

Q6 (a)(i)(ii)(iii) Most candidates scored all of the marks available here.
(b) Most candidates gained one of the two marks available for recognising data types.
(c) Only a few of the best candidates managed to gain one of the two marks available. No one was able to give a suitable advantage of using Unicode over ASCII

Q7 (a) Most candidates gained three of five marks available. Most lost marks by not explaining how selection of options was made in each interface.
(b) Only the better candidates were able to explain where command line features were used in a GUI.

Q8 (a) The majority of candidates were able to provide suitable types of validation checks but only the better candidates were clear about what a validation check was. Candidates were better at describing suitable verification checks on the data provided.

(b)(i) Most candidates realised the mileage field would be amended most often. Too many candidates however made the assumption that colour would be amended on a regular basis.
(ii) Those candidates that gave a correct answer in (i) provided the correct reason in (ii) Most candidates answered incorrectly here by stating that the field should be validated and not verified.

Q9 (a) Some good answers given here with the better candidates gaining three of the available four marks. Very few candidates could give a suitable answer for the role played by 'Customer Service'.
(b) Only the very good candidates gave suitable responses related to other Internet services customers could use.

Q10 (a) Most candidates gained the two marks available here for identifying a suitable method of connecting the two LAN networks.
(b) However few could make a suitable comparison between the different types of connection available.

Q11 Few candidates scored well here. As in the Foundation tier some marks were gained for referring to a spell checking process but very little else was seen. Candidates failed to mention they would use test data in the date field or to check that the scripts operated as they should.

Q12 (a) Good responses by candidates, many gaining full marks for correct programming sequence.
(b) The better candidates scored well in this section, often picking up full marks for a more complex set of instructions.

Projects

The November entry was relatively small compared to the May entry.

Most of the work was presented in a satisfactory manner, but the following guidelines may enable some centres to improve their candidates' marks.

Each project should have a cover sheet, clearly labelled with a minimum of the candidate's name, candidate's number and the centre number. A completed version of the IGCSE ICT coursework cover sheet would be suitable for this purpose. The sheet may be downloaded from: http://www.edexcelinternational.org/VirtualContent/82378/ICT_coursework_cover_sheet.pdf
Projects should be securely bound. Spiral binding or secure stapling will usually suffice. A single treasury tag or length of string is not really sufficient as pages can easily be detached when the project is handled.
Projects should have a contents page and matching page numbers. These could be written in by hand when the project is finished. It is not compulsory but it is always useful to know where candidates think they have put the different sections of their project.
Projects should be presented in a logical order, preferably Identify, Analyse, Design, Implement and Evaluate.

It was obvious that a number of candidates were submitting GCE O Level style projects. There is no prohibition on this but candidates must be made aware of the differences in the specification between O Level and IGCSE. Much of the work in an O Level project is superfluous to the IGCSE requirements and therefore gains no marks e.g. most of the systems analysis. On the other hand, the IGCSE requires more evidence of the design and production process. An O Level project would require a substantial rewrite to gain credit in the IGCSE. In particular, evidence of making and using advanced features of the software is essential for scoring extension marks.

It was also obvious that a number of centres had provided their candidates with a project template. This is not prohibited and the IGCSE Coursework Guide for Candidates could be regarded as being such a template. The guide may be downloaded from: http://www.edexcel-international.org/VirtualContent/83088/ICT_guide.pdf
Problems with templates arise in two ways:
Firstly, if the template is incomplete. This results in candidates being unable to access some parts of the mark scheme because the template that they are following does not include the relevant sections of the project.
Secondly, if the template contains too much detail. Section and subsection headings, with some guidance as to the appropriate content, will usually be acceptable. But, once centres start to give suggested wording or diagrams, markers are likely to refer the projects to be investigated for possible collusion.

Identify

Most candidates were able to identify a suitable problem, but it was clear that many of them had reverse engineered the whole project by making the application first and then arranging the other sections to fit what they had done. This nearly always results in the candidates losing marks by having weak identify, analyse and design sections.
Many candidates failed to fully identify their user. Higher band marks require identification by name, not just by the company or organisation.
User requirements or objectives were often generic and not testable. Providing that a system can find a record in 30 seconds, or that less staff is needed is very difficult to do.
Consideration of alternatives was often weak. Simply contrasting a computer based with a manual system is unlikely to gain much credit. Candidates should look at alternative computer methods and give good reasons why one method would be preferable.

Analyse

Access to higher band marks in this section is via the words 'fully explained'. Candidates should be reminded that the markers do not know them, do not know their users, have not seen the applications running and only have the written accounts to look at.

In particular, alternative outputs were rarely explored and when this was done, the alternatives proposed were often of the type, 'screen versus printout'. Alternative screen layouts, report formats or other variations on one type of output were rarely considered.

There were some good attempts at data flow diagrams, but descriptions of the collection and manipulation of the raw data were usually incomplete. Where candidates identify multiple raw data types or sources, they should try to include all of them in their write up.

Examples of raw data were very rare, word processed mock-ups are not very convincing.

Security and backup were mentioned more frequently than in previous years but were rarely well explained.

Design

Candidates should go through the process of making initial designs, showing them to their user, getting some useful feedback, making the final designs. Candidates who actually did that were in a distinct minority.

Far too many candidates simply reported user comment. This is a middle band marking point, with a little more effort, a signed letter or other evidence from the user would have given a higher band mark.

As with Analyse, candidates should be reminded that the markers only have the written account to look at. If the design is missing, so are the marks. Furthermore, if there is little or no design, the marks for Implement will be low, since they depend on a design being followed.

Testing was another weak area. Many candidates simply listed a set of validations. The test plan may well include such validations but it must also specifically test the objectives or user requirements given in the Identify section.

Implement

This section should be considered in three parts.

Firstly, candidates should not just present a finished product with no information about how it was made. Higher band marks are not accessible without clear evidence of a production process.

Secondly, they should clearly demonstrate that the design has been followed and the objectives met. This will be difficult if there was no design or only vague objectives.

Thirdly, the test plan needs to be followed and evidence given for the result of each test. Simply claiming that it worked is not worthy of marks.

Evaluate

The evaluations were generally weak. A lot of candidates did refer back to their original objectives and claimed to have met them but very few gave any evidence to back their assertions. A few page references would have sufficed in most cases.

Most candidates did not produce evidence of user feedback. Many had unsigned letters or reported comments but this is not enough to access the higher band marks.

Set Tasks

The following advice is repeated from the summer 2008 report and deals with presentation of the work and is applicable to both the 2008 and future papers. Following the advice it may enable some centres to reduce their workload and improve their candidates' marks.

- The Set Tasks do not need to be bound. They are best presented as loose leaf in an A4 plastic pocket or document wallet. Markers need to be able to compare pages, e.g. Design and final product. This is much easier with loose pages. If staples or other fastening methods are used, care should be taken not to obscure or damage the work.
- The Set Tasks and Projects should be submitted as two separate bundles of work. They are unlikely to be allocated to the same marker. There were several instances where centres mixed the 3A and 3B work or where a 3A project was swapped with a 3B Set Tasks. Putting a candidate's work into a single binding must be avoided as the Set Tasks will have to be removed and this may result in the work being damaged.
- All pieces of work should be clearly labelled with the candidate's name, number and task identification. The task identification becomes essential if a candidate does not complete all of the tasks as it can sometimes be hard to work out which task the candidate thought they were doing.
- Extra work must not be submitted. There are marks for sticking to the required number of pages. There are no marks for anything which has not been specifically asked for in the tasks.
- Anything that the candidate thinks is worth a mark should be annotated, explained and presented in task order. Markers do their best to find everything which is worthy of a mark but some candidates have the ability to present their work in the most obscure and muddled way possible.

All of the tasks have a design element. The correct sequence of events is design it first, make it afterwards. Doing things in reverse order often results in lower marks.

Comments on Individual Tasks

Task 1a - Design sketches for leaflet

Most candidates who attempted to do sketches were able to produce reasonable designs. Unfortunately, a large number of candidates had obviously done the leaflet production first and had then produced their designs. This often resulted in low marks as candidates failed to reproduce their work from 1b as sufficiently detailed designs.
Another problem was the lack of outline drawings to show graphical components, and in too many cases, lack of any graphical components at all.

Task 1b - Making the leaflet

Where there were adequate designs to follow, candidates usually scored well. Problems mainly arose from having poor designs or working backwards from completed pages to designs. Candidates should also be reminded of the importance of annotation to explain changes from their designs.
A number of candidates also lost marks because their printout did not make an A5 leaflet when folded.

Task 1c - Spreadsheet design

As with the pages in tasks 1a and 1b, too many candidates had obviously made the spreadsheet first and then turned it into a design. Annotation was also missing in many cases. Few candidates put any identification or title on the design.

Task 1d - Making the spreadsheet

There were numerous good examples of working spreadsheets but annotation was generally weak and candidates frequently did not show how the calculations were done.

Task 1e - Script or macro design

It was clear that some centres had given a bit too much guidance on how the data transfer should be done. It was also clear that some of those centres were using a non-workable or over complicated method and were costing their candidates marks.

Task 1g - Making the script or macro

Marks here were very much in line with those for 1e. Those candidates who kept things simple tended to score the marks here as well.

Task 2a - Database input screens

As in previous years, too many candidates had obviously made the database first and then turned it into a design. Annotation was also missing in many cases. Far too many of the input screens were simply Access default, with little or no attempt made to do any actual design. In many such cases, the fields were either default text or no details were given. This level of work is not worthy of credit.
Annotations and explanations tended to be rather sparse.

Task 2b - Making the service table

This was a fairly straightforward task and the majority of candidates were able to get marks here.

Task 2c - Linking the tables

This was a more difficult task, and only the higher grade candidates were able to score well here. More candidates could have gained marks if they had included better, or any, annotation to explain how the link worked.

Task 2d - The customer table

Too many candidates lost a mark by not having the required 20 customers.
As with the previous task, lack of annotation cost marks.

Task 2e - Amending the customer table

This was generally well done, most candidates were able to score on the task. As in previous tasks, too many candidates lost marks by not producing annotations. There were several interesting and even ingenious ways of stopping impossible upgrades.

Task 2f - The search

Most candidates produced some version of the search but setting a workable condition eluded most.

Task 2g - The mail merge

Candidates scored quite well on this task.
The main thing distinguishing the stronger candidates was the ability to demonstrate the link to the database.

Grade Boundaries

Option	A*	A	B	C	D	E	F	G	U
1 - 1F, 3A & 3B	-	-	-	49	43	37	31	25	-
2 - 2H, 3A & 3B	66	58	50	42	32	27	-	-	-