

# Examiners' Report Summer 2009

IGCSE

## **IGCSE ICT (4385)**

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Summer 2009

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### IGCSE ICT - 4385 1F (Foundation)

#### **General Comments**

There was a very low entry for the paper this series. Candidates mainly provided full answers to the questions and one word answers were avoided which is a good practice to see. Candidate's answers were contained within the allowable area without the use of continuity sheets which again is good to see and should be encouraged.

#### **Comments about Individual Questions**

#### Question 1

Q1 (a) (b) Good answers from many candidates but there was evidence of confusion between OCR and OMR from some candidates.

#### Question 2

Q2 (a) Well liked by candidates. Most answers seen exhibited a good knowledge of the use of email and how it differs to conventional mail systems. In (b) only the better candidates were able to offer one good reason for the use of video conferencing. In (c) however candidates were well aware of the additional hardware and software required to use a pc for video conferencing.

#### Question 3

Q3 (a) Few candidates were aware of the longer access time to data on a tape storage system. In (b) candidates were not able to explain that the storage capacity of tape was far greater than that of a CD-ROM and was therefore more suitable as a backup medium in the context given. In (c) only the better candidates could correctly label the backup system shown. In past years this question has always been answered with enthusiasm but this was not the case this year.

#### Question 4

Q4 (a) (i)(ii) Most candidates were able to provide a suitable validation checks in both cases, but only the better candidates could provide a suitable description of the process for the second mark. In (b) most candidates again only gained one mark here for indicating that a correct code had been entered and again only the better candidates could explain why it was not accepted by the system, or that the verification process should indicate that it was an incorrect value for the book in question.

#### Question 5

Q5(a)(b) Good responses from most candidates showing a good understanding of the services provided by the internet and how students can make good use of these services. In (c) however students were unaware of the problems associated with downloading large capacity data files.

#### Question 6

Q6 (a)(b) Good answers from most students. Candidates were well aware of the advantages of a networked computer system for the context set in the question. Answers given in (b) also demonstrated a sound knowledge of security procedures required for the protection of data stored on network systems. In (c) only the better candidates were able to show that read only files were required. Most candidates managed to gain one of the available two marks in (d) for naming a suitable package. Only the better candidates expanded on the package use for the second mark.

#### Question 7

Q7 (a) The majority of candidates stated the cell reference required. Few candidates provided the correct formula in (b). Some gained a mark for realising the formula needed to refer to cell B4 - none seen could give the required formula for calculating a percentage. Good answers were seen in (c) with many giving the correct formula for full marks. In (d) candidates demonstrated that they were fully aware of the process required to copy a formula into adjacent cells when required. Candidates did not appear to be familiar with the use of MAX and MIN functions required to answer (e) correctly.

#### Question 8

Q8 (a) This is the first section in the common section of the paper and was answered well by the majority of candidates, most answers referred to a floppy disk as a backup device and few of the many other options were apparent at this level. In (b) candidates mainly scored two of the available 6 marks and answers generally referred to the safe keeping of the backup and how often a backup should be taken. There was no mention of managing the backup process time of the backup.

#### Question 9

Q9 Question 9 was poorly answered by foundation candidates. Some marks were gained for including the items given in the question. Layout was generally poor and very little additional detail was added to produce a useable data entry screen.

#### Question 10

Q10 (a)(i), (b)(i) Good answers given by many candidates. Candidates could show where work location had changed by using IT and show suitable changes in job role. In (a)(ii) and (b)(ii) candidates confused the terms employee and employer causing them to give incorrect answers in each case.

#### Question 11

Q11 (a)(b)(c) Foundation candidates found this a difficult question. There was some confusion between computer modelling and model designed using CAD. Candidates were not aware of the uses of virtual reality and the differences between VR and a computer simulation. They needed to explain that a person needed to interact physically with a VR system whereas a computer could run a simulation on its own once the model was started.

#### Question 12

Q12 (a) All candidates scored something here. The better candidates were able to score two of the available three marks in this question. Candidates showed they were quite knowledgeable about database structures in this context. In (b) Foundation candidates were unable to recognise examples of 'Typical', 'Extreme', and 'Invalid' data in the context of the question presented.

#### Question 13

Q13 Foundation candidates were able to give WIMP features without an explanation of how they could be used. No Foundation candidate was able to give any other windows features that were of benefit to a user. Candidates could not relate their use of windows and answer in terms of 'User friendliness' or use of colour to produce a pleasing desktop etc.

#### Question 14

Q14 All candidates scored poorly here. Candidates were not aware that tables could produce sorted lists that were easier to locate information or that multi-media could produce an interesting animated display of data. Some of the more able candidates did suggest that charts could be used to compare results effectively.

#### Question 15

Q15 (a) Many Foundation candidates scored well here, demonstrating a good knowledge of some emailing techniques. In (b) candidates did not pick up on the fact that the address book could be used to produce a multiple send e-mail. Only the better candidates scored in (c) and realised the photographic material would be sent as an attachment.

## IGCSE ICT - 4385 2H (Higher)

#### **General Comments**

The overall qualifying responses of candidates were on par with last year's responses. Again candidates that had been prepared well by centres gained good marks.

Some centres still allowed candidates to use extension sheets. This number was significantly reduced this year.

#### **Comments about Individual Questions**

#### Question 1

Q1

(a) Most candidates gained the two available marks here.

(b) The better candidates gained the four marks available. The majority gained 2 marks. Candidates tended to talk in terms of the space available for backup rather than use the term 'storage capacity'.

#### Question 2

Q2

Good examples of screen entry forms were produced by the majority of candidates. Most gained 4 of the available 7 marks. Navigation buttons were generally omitted.

#### Question 3

Q3

(a)(i) Most candidates could give an example of how ICT has changed the location of work.

(ii) Many candidates lost marks here by confusing the terms employers and employees.

(b)(i) Only the better candidates could give suitable examples of a change in job role.

(ii) Many candidates lost marks here by confusing the terms employers and employees.

#### Question 4

Q4

(a) Few candidates understood the term modelling on a computer system. Most referred to a simulation in some respect- e.g. 'Flight Simulators'.

(b) Most candidates could provide a suitable example of virtual reality.

(c) Only the better candidates could explain how a VR system functions.

#### Question 5

Q5

(a) (i)(ii)(iii) Good answers by most candidates.

(b) The majority of candidates were able to give good examples of Typical, Extreme and Invalid data.

#### Question 6

Most candidates talked in term of the WIMP features. Only the better candidates could give other features associated with a GUI.

#### Question 7

Few candidates gained full marks here. Use of Charts and Multi-media were the favourites. The better candidates gave some idea of how tables might be used to convey information.

#### Question 8

Q8

(a) Most candidates knew how to use the email forward function.

(b) The majority of candidates only gained one of the available 2 marks here by not mentioning the information about the meeting forming part of the mailing.

(c) The majority of candidates only gained one of the available 2 marks here by not discussing where the image could be found.

#### Question 9

Most gained two of the available three marks. Some confusion between OMR and OCR was evident.

#### Question 10

Q10

(a) Most candidates gained the available 2 marks for this question.

(b) (i) Most candidates gained one of the two available marks. Only the better candidates could name a hardware device and a software item.

(ii) Few candidates realised a Broadband connection would be needed because of the amount of data needed to be transmitted. Most talked about the speed of data transmission.

(iii) Good answers by the majority of candidates.

#### Question 11

Q11

(a) (i) Poorly answered by most candidates - answers were not related to the fact that large amounts of data needed to be processed in one session.

(ii) Again poorly answered - most candidates tried to associate errors to the fact that the system would miss out forms and not give answers related to student data changing whilst forms were being held.

(b)(i)(ii) Candidates did not understand transaction processing in this context. Smaller number of entry forms being processed immediately etc.

#### Question 12

Q11

(a) Good explanations of check digit calculations given by most candidates.

(b) (i) Most candidates gave the correct verification method.

(ii) Only the better candidates could see that the Student Number field would use a lookup function for verification.

#### Question 13

Q13

(a) The better candidates gave a fuller answer - most answers were related to the use of 'Advanced search techniques' with no mention of specific searches.

(b) Only the better candidates talked in terms of copyright information etc. Most talked in terms of 'virus infections'.

(c) Most students talked about SPAM gaining 1 mark. Few mentioned the possibility of signing up for further information.

#### Question 14

Q14

(a) Most candidates gained one of the available 3 marks. Few realised the OS could be used to network the computers.

(b) The better candidates gained the two available marks by giving full answers relating to user accounts or access rights.

(c)Many candidates had very elaborate systems for checking the guest's ID. Few suggested using the system to lookup guest details.

#### Question 15

(a) Poorly answered by most candidates as few included a means of calculating the 1.5% discount.

(b) As in (a), most candidates could not provide a suitable formula to calculate the additional discount.

(c) This was not attempted by most candidates.

## IGCSE ICT - 4385 3A Project & 3B Set Tasks (Coursework)

#### Set Tasks

A detailed report on the individual tasks will be included in the examiner's report for the November examination. The following advice deals with presentation of the work and is applicable to both the 2009 and 2010 papers. Following the advice 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 Task. 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 do present their work in a very obscure and muddled manner.
- 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.

#### Projects

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.
- 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 an increasing number of candidates were submitting GCE O Level 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 much better evidence of the design and production process. An O Level project would require a substantial rewrite to gain the same degree of 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 Students could be regarded as being such a template.

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 untestable. Proving that a system can find a record in 30 seconds, or that less staff are 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.

## Grade Boundaries - June 2009

Option	A*	А	В	С	D	E	F	G	U
1(1F, 3A & 3B)	-	-	-	49	43	37	31	25	-
2(2H, 3A & 3B)	66	57	48	40	31	26	-	-	-

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