



GCE EXAMINERS' REPORTS

**ICT
AS/Advanced**

SUMMER 2010

Statistical Information

GCE

This booklet contains summary details for each unit: number entered; maximum mark available; mean mark achieved; grade ranges. *N.B. These refer to 'raw marks' used in the initial assessment, rather than to the uniform marks reported when results are issued.*

Annual Statistical Report

Other information on a centre basis is provided when results are issued. The annual *Statistical Report* (issued in the second half of the Autumn Term) gives overall outcomes of all examinations administered by WJEC.

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ICT

General Certificate of Education 2010

Advanced Subsidiary/Advanced

Unit Statistics

The following statistics include all candidates entered for the unit, whether or not they *cash*ed in for an award. The attention of centres is drawn to the fact that the statistics listed should be viewed strictly within the context of this unit and that differences will undoubtedly occur between one year and the next and also between subjects in the same year.

ADVANCED SUBSIDIARY / ADVANCED								
				Grade Boundary				
Unit	Entry	Max Mark	Mean Mark	A	B	C	D	E
IT1	6687	80	34.5	56	50	44	38	32
IT2	7122	80	58.9	72	63	55	47	39
IT3	3068	90	44.5	68	60	52	44	36
IT4	3614	100	76.8	83	72	62	52	42

N.B. The marks given above are raw marks and not uniform marks.

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Principal Examiner: Dai Rudge

IT1

General Comments

It was disappointing to see so many candidates do so badly on questions that were just simple variations from the specification, but needed a little bit of thought. Candidates did, though, continue to write well and had prepared their spreadsheet evidence better. A number of candidates seemed ill prepared for the fact that different applications have to be assessed over the course of a series of examination sessions.

Comments on Individual Questions

- Q.1 Most candidates seem to have a limited knowledge of user interfaces other than touch and biometric and very few could give a sensible use for a command line interface, or a real use for a GUI. This was the worst answered question on the paper.
- Q.2 (a) This question was better answered than in previous years but still not well answered as too many candidates thought that they had to write about the characteristics of good information rather than how good information can add value.
- (b) This part was answered worse than in previous examinations. Many candidates failed to distinguish between the different costs or give distinct examples.
- Q.3 Most candidates were able to answer well on the advantage of rotation to an architect and many could discuss walkthrough. Stress and strain prompted some interesting responses, with many thinking it took away the stress of working on a computer and a significant number thought that a wire drawing was for producing a diagram of the cabling around the building.
- Q.4 (a) Another area of the specification that does not seem to get good coverage, which left many candidates floundering and making incorrect points about the volume of data, or mentioning quality as being a problem which was precluded by the question.
- (b) Most candidates got at least half marks on this part of the question but the weaker candidates did not seem to realise that the question restricted them to discussing the processing of data.
- Q.5 (a) Much better answered than in previous years but still far too many candidates do not seem to be able to distinguish between verification and validation or understand the concepts.
- (b) Verification was well answered with most candidates gaining marks but too many candidates didn't use a sensible method of validation or didn't match the method with an appropriate field.
- Q.6 Most candidates seemed to understand what a query is, a lot fewer seemed to understand that a report was not just a basic printout and didn't think of formatting. Many candidates seemed to think that rehashing the question would help them explain what import/export is.

- Q.7 (a) The best answered question on the paper. Some of the weaker candidates failed to appreciate that the question was set in the context of the 'home' and lost marks by just giving general points on networking. Candidates also must realise that more depth is required than GCSE and that when they are discussing sharing that they have to make sure that it cannot be interpreted as simply passing a memory stick around.
- Q.8 (a) This part was fairly well answered with most getting half marks or more but too many repeated their examples.
- (b) Too many candidates wasted their efforts by giving details on methods of supporting teaching and learning rather than the benefits and drawbacks as the question asked.
- Q.9 Using a different context from last year seemed to throw many candidates who seemed to be discussing car crash simulations. The question was, however, a good discriminator as it didn't seem to put off the better candidates. Despite weather forecasting being specifically mentioned in the specification few seemed to understand how it works, i.e. you have to collect data from specific sources that use some mathematics to produce equations.
- Q.10 Most candidates seemed to have heeded the message to number their printouts and refer to this numbering in their responses. It was also pleasing to see the decrease in the volume of paper (by using screenshots instead of printouts) which made it easier for them in the examination. Candidates lost marks by not being able to say why they had used the functions. Many did not seem to use the methods of simplifying data entry discussed at the in-service sessions.

IT2

General Comments

Centres should now be aware of the requirements of this new coursework unit. Many are still misinterpreting the early background and analysis of documents section and should take note of the detailed comments made later. Some geographically close centres are making very similar mistakes and if working as a network group need to revisit the advice given on the WJEC website as to how to interpret the mark scheme.

Most candidates continue to provide good evidence and cropping of evidence is less of a problem than in previous years.

However, as stated last year there are still candidates who wasted their time in explaining how to insert tables, etc., when this feature can clearly be seen on the printout. Some candidates are spending a great deal of time explaining how they '*did bold*' and producing very thick portfolios but where evidence is clearly required they do not provide it in an acceptable form making it difficult for the moderator to support the Centre marks. The comments below give detailed guidance.

Comments on Individual Sections

Analysis

Background

This was well done.

Identification of 3 documents

A screenshot of the actual document must be included. This only needs one sentence per document saying what type of document it is and an outline of the document's purpose. It is acceptable to put in a website to help candidates who could not get 3 paper documents.

Ethos or house style

Candidates still tend to *describe* colour schemes, fonts, etc., without analysing or explaining how this contributes to the 'ethos' and house style. Some candidates still mistake age group or target audience for ethos and therefore should not be awarded marks.

Analysis of an organisation's documents

This is still the most troublesome section. Teachers who cannot attend INSET are advised to study the teacher guidance and exemplar material. Many Centres double or even triple marked.

Detailed analysis of two paper based DTP documents

This is an area which seemed to be misinterpreted by certain clusters of Centres. It is **not** acceptable to use a website in the analysis of two DTP (paper) documents. Candidates should be reporting on the purpose, data and audience of both documents. One mark is for identifying the **data** on **both** paper documents and one mark is for identifying at least four tools and techniques on either one document or between both documents.

NB.

- the latter does **not** include fonts and font styles
- all three of bold, centre and underline must count as one feature only.

A screenshot or the actual document must be included showing these features. A moderator cannot support marks for features which cannot be seen. Candidates should identify where on the document these features can be seen.

Automated documents

The purpose, data and audience of an actual document or a process which could be automated must be described in detail. When describing an actual or potential automated document, candidates failed to describe or suggest in detail suitable merged fields although some were given full marks.

Webpage or presentation

The purpose, data and audience of an actual website or presentation or potential website or presentation must be described in detail. Vague statements such as *“you can put a presentation in an estate agents window”* does not describe its purpose, its audience or the data required in the presentation. When analysing an existing or potential web page candidates were required to identify at least four different techniques which were used or could potentially be used in order to get the second mark. Many did not and some were given full marks which were not merited. Vague statements such as *‘could include hyperlinks, sound and a video’*, should not be credited. Comments should detail what the hyperlinks would do, what the video would be about and what its purpose is, etc.

Task 1: Desktop publishing

Centres are again to be congratulated on encouraging pupils to give clear evidence enabling moderators to support most centre marking in this section. Many candidates still confused image/ ethos with the target audience or gave a general description of a colour scheme or logo they wished to use. Candidates who simply write one sentence saying *‘I am going to stick to the ethos outlined earlier’* must not be given credit. More depth is required.

In order to gain the mark candidates needed to identify the philosophy, vision or persona being reflected by the document **or explain or justify** why they used a particular icon or colour scheme.

Candidates must print out their final document. **Only features which appear on the final printed leaflet should be given credit.** Some candidates produce several versions of the final leaflet with some features appearing on one version and not on others. Moderators should not be expected to sort out which is which. Some candidates clearly show the construction of the header and footer or watermark but this should not be credited if it does not appear on the final printed document.

Detailed design of the document

Most designs were quite detailed but the coverage of data and eight techniques to be used was still weak in some whole Centres.

- One mark is awarded for an outline layout with inherent page orientation and identifying which frames are text and which are for pictures.
- One mark is awarded for **details** of the **‘data’** both text and graphics
- One mark is awarded for details of fonts and font sizes to be used
- One mark is awarded for details of at least eight special features used such as tables, bullet points, tab settings, line spacing, paragraph styles, etc.

Use of basic features

This was an area where evidence could be clearly seen on the printed leaflet. The only extra evidence required as evidence of basic features is screenshots showing the origin of two different sources of graphics.

It was very useful where candidates annotated their final document, using arrows to show where they used each feature, this helped moderators to detect them more quickly.

Both **headers and footers** need to be present for a mark to be awarded. Some candidates used only a header or a footer and hence should not have been awarded the mark.

Sometimes the footer was lost in the body of the text where margin sizes were not suitable or it was obscured by a large border and again candidates should not be awarded any marks. It is also important to note that if candidates use automatic pagination the mark is awarded against the advanced section, so something else is needed here. There was also often evidence of headers and footers only appearing on one page in the final document and sometimes although there was evidence of construction they did not appear on the final document.

Use of Advanced features

Here supporting evidence is absolutely essential for the features used.

The features must appear on the final document and not just in construction evidence in order to be credited.

The most popular techniques attempted by candidates included layering, watermarks, page or frame borders, line spacing and customised tables. Many candidates could have improved their reports by providing clear before and after screenshots for:

- different paragraph formats,
- own tab settings,
- own indents

Both ***Superscripts and subscripts*** needed to be used to gain the mark and it is essential that screenshot before and after evidence is given for candidates to be credited with the mark. Many candidates seemed not to realise that they had to include both subscript and superscript for the mark. Centres should discourage candidates from inappropriate or nonsense use of superscript and subscript just to cover the marking criteria as this does not qualify for the mark. A few candidates were credited with use of customised tables for simply shading in tables or borders.

Task 2: Automated document

Note that candidates are expected to produce letters of *'professional'* quality as most of them stated in their ethos. Any mistake in the database or the letter should be penalised.

Candidates should be encouraged to spell check their final document, proof read it, and in particular check for capital letter and basic grammar mistakes. Candidates should also check that the content of the letter matches the stated purpose. Many of the mistakes seen this year were similar to last year.

Design of document

This was generally well done but candidates must remember to plan their three macros at the design stage and identify the mailmerged fields. A few candidates did not achieve the 'data' mark because they just wrote *'body of letter'* and did not describe the content of the letter.

Use of Basic Features

This was generally well done but some Centres did award marks when there was a clear spelling or capital letter mistake or inconsistencies in the use of capital letters in titles.

Candidates should be encouraged to check for capital letter mistakes in the data from the database.

Use of Advanced features

Again this was well done but some candidates need to think about the 'professionalism' of their macros. Many candidates attempted to do a variety of three macros. Some candidates continue to crop the evidence especially when saving their mailmerge template as a template document (not letter headed notepaper or a blank page). They display the dialogue box on top of the mailmerged letter so the moderator cannot see the detail to confirm it is the mailmerged template. Candidates should be encouraged to ensure they show the mailmerged fields in the background. A few candidates attempted other possible approaches using automated questionnaires.

Task 3: Presentation

The evidence for this was greatly improved. The main problem area was with the detailed design of data and features such as hyperlinks, hotspots, bookmarks, animations, transitions, background template, sound, video and animations.

Background style

Candidates lose this mark if they use different backgrounds on different slides without justification.

Animations and transitions or rollover buttons on web pages.

Usually very well done; candidates producing web pages used scrolling banners, etc, as animations. For transitions they used rollover buttons or some edited the html coding to change the colour sequence from one page to another. For Centres using the newer version of Dreamweaver, another alternative for transitions could be image effects (e.g. thumbnails as illustrated by YouTube or Flickr and CS4 has a new feature called Web Photo Album or an add-on called Lightbox which can emulate what you see on major websites). **It must be made clear** that if a technique is credited as a transition it cannot also be credited as evidence for animation.

Use of Sound

Many candidates did attempt to capture sound and many provided good evidence. Some candidates only showed two 'imports' e.g. import onto disc from hard disc and import into presentation.

Use of original video.

Many candidates planned detailed storyboards but some did not put details of timings and effects used on their storyboard. Candidates must produce their own original individual video and applied effects. Some had reduced size or very cropped screenshots so it was difficult to agree their evidence. Candidates should be encouraged to annotate their evidence.

Use of original animation

This was generally well done but a complex animation is not 3 frames/clones where an object moves a very small distance in a straight line. Three frames were given as a guide to three different events.

Evaluation

This section was a clear differentiator with a wide variety in the quality and quantity of candidate work. This year Centres were on the whole more demanding, expecting more detailed and critical analysis before awarding the marks. However some centres clearly do not understand the depth required and gave full marks for shallow summaries of what the candidates did.

Compression and storage techniques

This was generally over marked by Centres, but having said this there was a general improvement overall. Candidates are expected to discuss in detail the relative merits of at least three different compression techniques they have used. They should identify and relate it to their own files used and justify their choice. Most candidates did discuss three different techniques but did not identify their own files nor did they consider alternatives and justify their choice. General discussions of zipped files does not merit marks.

IT3

General Comments

Candidates continue to write well and most candidates made a good attempt at the paper. Those who did least well gave responses generally lacking in detail.

Comments on Individual Questions

- Q.1 This question has been answered better in previous years. The weaker candidates tended to duplicate the points or thought that, windows, icons, etc. were the factors rather than the points mentioned in the specification such as 'consistency of signposting and pop up information'. Others lost marks by not being able to match up their explanations with the matching factor and sufficient detail.
- Q.2 (a) It is surprising at this level, that some candidates cannot draw a diagram illustrating a star topology. Many candidates lost marks by not showing a server or labelling the cables.
- (b) A number of weaker candidates didn't notice that they had to give two advantages of a ring and not a star network. Again many candidates lost marks by just discussing general advantages of networks.
- (c) Most candidates were able to give one or two factors but failed to gain further marks because they were unable to discuss them in detail.
- Q.3 It is still surprising that many candidates can only describe two facilities needed to turn a web-site into an e-commerce operation.
- Q.4 (a) The better candidates answered this question well but the weaker ones couldn't describe two different changeover strategies let alone discuss their relative advantages and disadvantages.
- (b) A poorly answered question, with many candidates only able to give one or no point on why users might become dissatisfied with their ICT system. I find this strange when they often have to change their mobile phone, etc., to get the latest one.
- Q.5 (a) Most candidates gained a mark for the 2nd part of the definition but then failed to give a sensible example.
- (b) Many candidates were only able to discuss two of the factors and consequently dropped a lot of marks.
- Q.6 (a) Slightly better than in previous attempts at this topic, but a significant number of candidates do not seem to understand this topic and just want to discuss problems rather than the factors to take into account when doing a risk analysis.
- (b) Many candidates did reasonably well on this part but a significant number dropped marks by not actually identifying a real problem, giving a real affect on the Health Authority and not giving enough detail in their strategy to overcome the problem.

- Q.7 (a) Most candidates answered this part well but a number of candidates could not give three correct terms for their health issues and were too vague in their preventative measures.
- (b) Again quite well answered with most candidates getting at least half marks.
- Q.8 This is another topic on which candidates write well. Weaker candidates still wanted to talk about crime even though this was not part of the question. I was surprised though to see so few write about topical issues such as the issues with Google in China.
- Q.9 (a) Candidates lost marks by not matching up their threats to the data with the possible consequences, and by not illustrating their answers with examples.
- (b) Candidates lost marks here by repeating the same method or giving a method which was not a prevention i.e. audit logs, or by not giving enough detail.
- Q.10 (a) (i) The fact that the question did not ask them to define a relational database seems to have thrown a number of candidates as despite them having to normalise data in their coursework they could not explain what it was.
- (ii) Very well answered, with candidates mainly only dropping marks by forgetting to show their foreign keys or using non-realistic ones.
- (iii) The better candidates scored well on this question but the majority did not seem to realise what made them more secure.
- (b) This part was reasonably answered. Weaker candidates could not define a distributed database and tended to contradict themselves in their answers.

IT4

General Comments

Most Centres clearly understand the requirements of the specification and have heeded the advice given at INSET. A few Centres were following the old specification for ICT6 and do not seem to have realised the specification had changed. There were many good examples of projects with some exceptional examples going far and beyond the requirements of A2.

Most Centres have very much improved the presentation of the evidence required to enable moderators to support marks. Centres should ensure that internal moderation of the work takes place as in some centres there seem to be discrepancies in teachers' interpretations of the mark scheme. There are still some areas where supporting evidence could be improved.

Comments on Individual Sections

Analysis and user requirements

This area had significantly improved in the level of depth and detailed coverage. Some candidates seemed to just provide a list of what they had implemented and some even wrote it in the past tense. Centres are improving in their understanding of the requirements of this section but for the most part user requirements tend to be general and lack detail specifically relating to the organisation.

Design

Design of queries

Some candidates designed more than the 6 queries required. Some were designed well but others had no reasons. Some candidates did not give details of field operators and criteria where required. Moderators had to pick their way through to see if any matched the specification requirements. Candidates should not be discouraged from using more queries but just as with validation, should identify which they wish to be considered for marking.

Although reasons have improved, in some centres they are still descriptions of what the query does.

Centres should note:

- Reasons for queries could be strengthened and could include fieldnames and operators and criteria where required
- Both single table queries require criteria and should not be used only for sorting
- There should be two single table queries and only one multiple table with criteria. The other multiple table query should not have criteria and should have a different use other than searching for data.
- Where candidates do similar topics to each other, e.g. hotels, they should be encouraged to design different queries.

Design of validation

This was generally better but Centres should note:

- Drop down list and input mask wizards provided by Access are not acceptable as suitable validation techniques for A2. Candidates should not be discouraged from using such techniques but they cannot be awarded marks in the validation section. Candidates could use range checks, OR, date validation or original input masks.
- Validation using input mask wizards should not be awarded any marks in design, implementation or testing.

Design of reports

Centres should note:

- Candidates should design and implement original headers and footers
- Calculation in the report should be different to that in the query or form. Many candidates use the same formulas and this should be discouraged
- =Date() is not acceptable as a calculation in a report
- =Now () is not a formula and is not acceptable as a calculation in a form.
- Candidates should not have implemented solutions in their design

Design of automated routines

Centres should note:

- Timers by themselves are not regarded as sufficiently complex to count as an automated routine
- Candidates should not have implemented solutions in their design

Implementation

Most candidates gave good evidence of the implementation of their solution.

Centres should note:

- Reports must have original headers and footers
- Suitable test data should be used to show sorted and grouped data on the final report, not just construction evidence. This should, therefore, be evident in the data in the final report and not just in construction
- Calculated fields in the report should total up data from more than one record
- Candidates should create their own macros and not use the wizards on buttons in forms
- Splash screens and security VB could be more clearly separated out as two different routines.

Testing

Most candidates had good and detailed test plans.

Centres should note:

- In some candidate work there was no evidence of the dialogue box and hence the search criteria for testing the parameter query
- Calculation in query or form should be tested
- Candidates should test password routines with valid usernames and passwords and also invalid usernames and passwords.

User documentation

Centres should note:

- In user documentation the database is unlikely to be kept on the desktop.
- In user documentation candidates should show before and after in the delete section. It is not enough to say click a button when describing how to add, edit, delete data and run different queries
- Disaster recovery needs recovery instructions not just backup. Disaster recovery should be extended to a detailed description on how the database can be recovered and reinstalled and not just how it is backed up.

Evaluation

Centres are beginning to be more demanding with candidates producing more critical analysis rather than a running commentary of their project implementation. However it still tends to be an area where centres are over generous.

Evaluation needs to be a more detailed analysis rather than description of what was done and needs to be critical to justify awarding higher marks.



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