



GCE EXAMINERS' REPORTS

**APPLIED ICT
AS/Advanced**

SUMMER 2012

Statistical Information

The Examiner's Report may refer in general terms to statistical outcomes. Statistical information on candidates' performances in all examination components (whether internally or externally assessed) is provided when results are issued.

Annual Statistical Report

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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APPLIED ICT
General Certificate of Education
Summer 2012
Advanced Subsidiary/Advanced

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ADVANCED SUBSIDIARY

Grade Boundary

Unit	Max Mark	A	B	C	D	E
AICT 1	100	73	65	57	49	41
AICT 2	100	80	70	60	50	40
AICT 3	100	78	67	56	46	36
AICT 4	100	77	66	55	45	35

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

ADVANCED

Grade Boundary

Unit	Max Mark	A*	A	B	C	D	E
AICT 5	100	89	79	68	58	48	38
AICT 6	100	90	80	70	60	50	40
AICT 7	100	90	80	70	60	50	40
AICT 8	100	90	80	69	58	48	38
AICT 9	100	90	80	70	60	50	40

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

AICT 1 – eBusiness

General remarks

The AICT 1 paper is divided into two parts; Part A comprising a one hour written examination paper and Part B, a series of tasks to be carried out in a practical two hour examination.

The paper for Part A was provided to centres in an on-screen format that requires candidates to enter their responses into text boxes with one screen per question. Where centres were not able to access the on-screen examination, traditional paper-based examination papers were used. These papers required candidates to write their responses in the spaces on the paper. Neither examination format appeared to cause problems from the candidate's perspective nor did the format appear to influence candidate outcomes.

In many cases candidates provided brief responses to questions that carried a significant number of marks. Candidates should note the wording of the questions, which is designed to suggest the level of the detail required in candidates' responses by the use of words or phrases such as 'state', 'describe briefly', 'explain' or 'describe in detail'.

Centres and candidates are reminded of the value of giving examples to clarify an answer and in some cases to provide additional evidence of a candidate's understanding of the topic of the question. A good example, even if not specifically requested, can often help to secure a mark when a description is lacking clarity or detail.

Some candidates lost marks by not relating their responses to the context of the question or the given scenario. Candidates should be aware that this is an applied qualification and the examination is designed to test their ability to put their knowledge of ICT into the given situations. If a question describes a specific context, and invites the candidates to refer to the context, then marks will be lost if this is not done.

The standard of language used was generally good, though some weaker candidates lost marks through the apparent inability to express themselves clearly.

In Part B of the examination, candidates were required to carry out a series of on-screen practical tasks set in the same context as Part A of the examination. Many candidates were able to demonstrate good practical skills in the use of database, spreadsheet and word processing software. However the ability of a significant minority of candidates to use database and spreadsheet software was concerning as they would have all been required to carry out the coursework tasks for AICT 2 as part of their AS studies.

Part A – written paper (40 marks)

Question 1

(a) *Name the type of organisation that currently best describes Golden Days?*

The specification includes a list of types of organisations and candidates should have used this content to respond to the question. A disappointing number of candidates seemed to be unfamiliar with the specification content. Many candidates seemed confused between the manufacturing sector and retail organisations.

(b) *To be successful a business must have good communications. Identify two methods of internal communication that Golden Days could use.*

Many candidates were able to identify two appropriate methods of internal communication as detailed in the specification. However, a significant minority of candidates identified informal methods of communication often used by their peer group that would not be acceptable in a commercial organisation.

Question 2

Name one secondary source they could use and describe the information they could obtain from the source.

Some candidates scored well in this question and were able identify sensible secondary sources of information such as published company reports. However candidates' should be aware that research outcomes are valuable and would not be shared with competitors.

A significant minority of candidates incorrectly identified primary sources rather than secondary sources and suggested carrying out surveys or interviews.

Question 3

Describe two features of an email package that the marketing department would find useful

Most candidates were able to identify appropriate features of email software. However, a minority of candidates failed to link their responses to the context and therefore were not able to access further marks in this question.

Question 4

Describe the main functions of an MIS

In the past questions on this topic have not been well answered. On this paper few candidates appeared know what a management information system is and even fewer were able to explain how such a system could be used by the organisation to improve their business. Many candidates appeared to confuse the functions of a MIS with computerised stock control systems with others describing the functions of basic office applications.

Question 5

Information Flow question. Candidates are provided with a scenario and a partially completed diagram.

Label the diagram to illustrate the information flows in the process.

Most candidates gained 3 or 4 marks for this question. However, candidates' should ensure that they identify the information that flows through the organisation rather than materials or objects the may accompany documents such as delivery notes.

Question 6

Describe how a computerised stock control system would help Golden Days to improve their stock control process.

Some candidates had been well prepared to respond to this question and were able to identify the functions of a computerised stock control system and relate them to the given organisation. Other candidates did not appear to have the knowledge of this application that is required by the specification.

Question 7

Describe two features of database software that would ensure that the correct customer details can be retrieved when required.

Most candidates were able to identify features of a database but not necessarily features that would ensure that the details retrieved were accurate. Successful candidates identified features such as validation, input forms and the use of related tables to reduce duplication.

Question 8

State three principles of the DPA.

Far too many candidates attempted to reword the principles of the act and often succeeded in producing three statements that only referred to security of data. Many candidates appear to believe that the act requires an 'opt in' rather than 'opt out' approach to details being used commercially.

Question 9

Describe two ways in which ICT can be used to raise sales of the toys

A minority of candidates produced answers to this question that were not appropriate for the level of this qualification such as, 'produce posters and flyers'.

Some candidates produced good answers to this question that included responses such as targeted mailshots, ecommerce and the use of cookies to reach a target audience.

Question 10

Describe the features and facilities of project management software that will help Golden Days to introduce the rocking horses to the market.

This topic has been included on papers in the past but responses are still sadly lacking in understanding and detail. Many candidates appear to have no knowledge of the purpose of this type of software. Few are able to apply the use of the software to the effective management of the expansion project.

Part B – Practical tasks (60 marks)

Many candidates were able to access marks for the three practical tasks. However, some candidates appeared to have difficulties in carrying out even the most basic tasks and some even discussed their lack of familiarity with the software applications to be used in their evaluation.

Task 1 – Marketing

- a) *The Marketing department has data about the value of sales made by each representative. This data needs to be analysed.*

Most candidates were able to import the given data to a new worksheet and many candidates were able to use a SUM function to add up the sales for each representative. However, very few candidates were able to use the absolute cell references or named range required to ensure that the function could be replicated.

A significant minority of candidates were not able to use a VLOOKUP statement to look up relevant rates of commission. Most candidates were able to calculate amounts of commission and a pleasing number were able to use an IF statement to generate an appropriate message.

- b) *The sales department would like to send out personalised letters to each of the sales representatives, informing them of their commission*

A surprising number of candidates did not appear to be familiar with the layout of a standard business letter. The specification includes a list of business documents.

Most candidates were able to insert their graph into the body of the letter and many of them were able to centre their graph.

Many candidates were able to include mail merged content in the letter but few formatted this information in an appropriate manner.

Task 2 – Administration

The administration department has details of a sales meeting that the Sales Manager, Jack Jones, has arranged. You will need to:

- *Create an agenda document and insert the information contained in the Agenda file*
- *Put the items on the agenda in a logical order*
- *Use the numbering facility within the word processing software to number each item on the agenda*

Most candidates were able to insert the information into a word-processed document. Again few candidates appeared to have any knowledge of the layout or format of an Agenda and most failed to gain the marks for this relatively simple task.

Task 3 – Sales and Marketing

Golden Days can be commissioned to produce “one of a kind” toys. Each toy is individually designed, has its own plan number and is made to the exact requirements of the client.

- a) *The finance department has details of clients and the toys they have ordered. These details now need to be organised.*

Most candidates were able to recognise the need to split the data into a clients and a toys table. Many candidates used action queries to achieve this, gaining additional credit for their work.

Most candidates attempted to create relationships between their tables. Some candidates failed to recognise the need for the use of primary keys for both tables. Few candidates gained all marks available for validation.

- b) *The marketing department requires an input form to assist with the input and viewing of information on clients and specially made toys.*

Most candidates were able to create an input form based on the Client table and many were able to include a sub-form to show the clients' orders. Some candidates failed to re-size the logo appropriately. Candidates who had not been able to structure their data correctly were unable to include the required sub form.

- c) *The finance department sends invoices to its clients. Invoices should only be sent to those clients whose toys are ready to be despatched.*

Many candidates had difficulties in creating the calculated field for the amount outstanding from the total payment. Similar questions have appeared on papers in the past and candidates should be prepared to be able to carry out these types of queries.

Some candidates were able to produce well-formatted invoices using the report facilities of their software. However many candidates struggled to insert appropriate page breaks, calculated totals and the required IF statement.

- d) *Evaluation*

In a word-processed document, describe two ways in which the database could be improved. Explain the features within the database software that you would need to use to carry out these improvements.

Some candidates were able to access all marks available for this task and produced good explanations for ways in which the database work could be improved.

However, this task was not well done with too many candidates provided a description of the work they had carried out rather than identify specific suggestions for improvement. save here :

AICT 2 – eBusiness

General Comments

This summer many good projects were submitted for moderation with a large number of centres marking to the correct standard. The majority of centres correctly completed the required administration. It would help in the moderation process if the centres assessors could complete the comment/justification part of the cover sheet and indicate the mark awarded for the spreadsheet and database separately.

SPECIFICATION

Many candidates were able to analyse the scenario and produced a working specification summarising the purpose of the project. As seen last year, most candidates were unable to give technical justification of the methods to be used in the solution as they did not have the necessary prior skills and knowledge of the database and spreadsheet software.

SYSTEM DESIGN

This section was completed to a good standard by the majority of candidates. However in some instances the design matched the completed system and seemed to have been completed retrospectively. It is essential that the design is completed before the implementation and should not be changed to match the completed system.

IMPLEMENTATION

The quality of the database solution was good with the majority of candidates producing a series of related tables and effective data entry forms. The output of some of the reports would have benefited from additional formatting to replicate standard documents.

An improvement was seen in the spreadsheet solution with many candidates producing good quality input forms that included validation to assist in data entry and well formatted outputs. Some candidates chose to mail-merge the payslip and this had a negative impact on achievement.

TESTING

Many candidates failed to achieve the higher mark band for this section as they did not produce prototypes.

Candidates should be encouraged to design test data to be used throughout the testing of both systems. The test data should include normal, extreme and erroneous data. The normal data should remain in the completed systems as this assists the moderation in terms of assessing functionality and outputs.

DOCUMENTATION

Most candidates produced good screen-based instructions for the use of both the database and spreadsheet solutions. However, many candidates failed to produce technical documentation that provided sufficient detail to allow a competent third party to carry out maintenance of the systems.

REVIEW

This section was completed to a good standard by candidates who had produced a specification that included measurable objectives that could be used to structure the review. It was noted that some centres encouraged the use of a design and implementation log and this was useful for candidates to comment on their own performance and changes of approach.

PORTFOLIO

The majority of candidates produce good portfolios to showcase their work. However it was noted that some centres gave candidates a template hence limiting the marks that candidates can be awarded.

AICT 3 eWare

General remarks

In most cases candidates had successfully addressed the requirements of the controlled assignment 'Music for you' and produced the required outcomes completed to an appropriate standard for AS level. As with the other units of the practitioner qualification the entry for this series was relatively low.

Task 1 - Preliminary research

Most candidates presented evidence of useful Internet based research that addressed the software and hardware requirements indicated in the scenario. The more successful candidates included summaries of the information gathered.

For future series candidates should be reminded to acknowledge their sources, as relatively few included any form of bibliography.

Task 2 – Specification

Most candidates produced technical specifications that covered the hardware requirements indicated in the scenario. Less successful candidates tended to rely on manufacturers' technical specifications with little editing and little contextualisation.

Some examples demonstrated a lack of understanding, by including devices that were wrongly described, or unnecessary. Common errors included the selection of notebook computers without DVD drives and the specification of wireless adapters in place of mobile internet devices.

Successful candidates included alternative specifications with some discussion on relative merits and disadvantages, leading to well reasoned final recommendations.

The most successful candidates related their choices to their interpretation of the client's requirements and gave software equal consideration, covering operating systems and the specialised software applications indicated in the scenario, in addition to the standard office applications that a business is likely to require.

Most candidates included quotations based on retail prices obtained from online catalogues. As in previous series some candidates were reluctant to use the full budget, seeking to save money and basing their final selections on cost, rather than performance.

Most quotations were presented using spreadsheet software, some designed to allow consideration of alternatives. Some effective examples of quotations cross-referenced by hyperlinks to the technical descriptions were seen.

Task 3 – Enhancements

The scenario should guide candidates towards a selected area for further enhancement, in this case video and audio editing. A minority of candidates failed to identify this area and concentrated on general enhancements to their specifications.

Task 4 - Configuration

Candidates were required to carry out five separate configuration tasks using the simulation software provided and use screen-prints to evidence the configuration work. Candidates were also asked to justify their selections for the various settings.

Most candidates scored high marks in this section and carried out the required configurations correctly. Where marks were lost this tended to be the result of very brief, or missing, justifications.

Task 5 - Customisation

Candidates were required to create three automated routines or macros to help handle information relating to ticket sales and to provide evidence of their routines in the form of annotated code listings. No other evidence was required.

The majority of candidates produced the required listings although the standard of annotations was variable. Some candidates provided links to application files and/or screen prints of the recording process in progress, but lost marks by omitting the required listings.

Tasks 6 and 7- Standard ways of working

Candidates were asked to produce documentation (memo and fact sheet) on standard ways of working to suit two distinct purposes. The intention of this section is to assess the candidates' knowledge of standard ways of working, as described in section 3.8 of the specification. The specific topics are 'Safe working', 'Ergonomics', 'Security' and 'File management'. The specification lists the areas that should be covered for each topic.

Most candidates were able to offer concise guidelines for working safely when using ICT, although it was disappointing to see many submissions not being set out as a memo, as required.

The fact sheets on data security and integrity also provided useful information and some well formatted documents with well summarised information were seen.

Task 8 –User support

Candidates were required to create three flow charts, each designed to help trouble shoot a common ICT problem. Most candidates included three charts based on a sequence of questions with a reasonably logical flow between alternative responses. The most successful candidates treated each problem individually and included charts with questions of increasing technical content leading to the problem being solved or reference to further technical support.

Task 9 - Review

Candidates were requested to relate their technical specifications to the client's requirements and consider the value for money they had achieved.

Candidates scoring high marks presented evaluative comments about their work without lengthy narratives on process. They identified changes of approach likely to lead to improvement of performance and / or outcomes and avoided vague suggestions about organisation of time and making greater effort.

Task 10 - Client Information Pack

Candidates are required to link their work to a given template, or Client information pack. The use of the template is intended to help candidates ensure that all work is completed and that the finished versions of the work for each task are presented to the examiner. It should be noted however, that if work is not linked to the cover sheet the examiner will look for work in the folders and will give credit for all work found.

Most candidates linked all their evidence to the given template, adding links as required to suit their files and thereby gained full marks for the task. A minority of candidates had re-organised their work folders and files after linking to the templates and therefore did not provide a working information pack.

AICT 4 – eMobile

GENERAL COMMENTS

A greater number of projects were seen this series with some centres marking to the correct standard. All centres completed the required documentation correctly. Again, it was pleasing to see the variety of approaches to the completion of the coursework and how candidates took differing perspectives to the requirements of the brief.

In the main, candidates did not achieve good marks in the Networking, Connectivity and Internet Recommendations sections. Centres commonly gave credit for theoretical understanding and bookwork for these areas. Whilst it is important for candidates to have knowledge topics contained within the specification, this should be used to make specific recommendations for the proposed hardware solutions that are recommended for the family. Costings and options should also be included in these sections.

The comments below are specific to the projects seen this series and reinforce previously published guidance for successful completion of each section. The recommendations to candidates should assist the completion of the projects.

REQUIREMENTS SPECIFICATION

Some centres successfully completed Requirements Specification sections whilst some centres chose a different approach in that they combined the family requirements with the Hardware and other recommendation sections. Whilst this did not necessarily restrict the candidate marks, this did make it more difficult to award the credit for both elements. Not all candidates made clear their assumptions or interpretations of the scenario. Not all candidates summarised the budgetary limitations.

Overall recommendations to candidates for this section would include:

- Use the given scenario to summarise the requirements for each member of the family take each member of the family separately. The specification should be a single document for the entire family.
- Use subheadings for each of the following categories: Hardware requirements; Networking requirements; Connectivity requirements and Internet requirements
- Discuss any assumptions you are making
- Include details of future requirements for the family
- Summarise the budget limitations

HARDWARE RECOMMENDATIONS

Some centres gave accurate marks for this section and it was pleasing to see the variety of options recommended for the scenario. Many candidates did prepare this evidence for the eQuote as though they were working for the organisation, however sometimes the context of the presentation of the evidence lacked the professionalism one would expect from a business organisation. Some candidates included external links to live Internet sites that would encourage the family to purchase from another provider and could also not be guaranteed to still be available at the time of moderation.

Overall recommendations to candidates for this section would include:

- Remember to put this into context – YOU are working for a company and you would like the family to purchase the items from YOU – avoid directing the family to another provider.
- Avoid copying and pasting copious amounts of detail here (focus on the necessary detail).
- Discuss the benefits and drawbacks of each option and make your recommendations.
- Include costings for each item

NETWORKING RECOMMENDATIONS

Many candidates presented some good recommendations for the networking solutions for the family and included some schematic diagrams for connections and arrangement of devices – this is very good practice for this section. It was evident that work presented from some sections focused mostly upon theoretical understanding of items covered in the specification rather than recommendations for the use and implementation of network hardware for the family. N.B. It is not necessary to repeat the networking recommendations for each member of the family should there be a household solution.

Overall recommendations to candidates for this section would include:

- As with the previous section, remember to put this into context – YOU are working for a company and you would like the family to purchase the items from YOU – avoid directing the family to another provider.
- Make specific recommendations. Avoid copying and pasting copious amounts of detail here (focus on the necessary detail).
- Discuss the benefits and drawbacks of each option and make your recommendations.
- Include costings for each item
- Consider a network diagram / animated model
- Explain security issues and options for the family

CONNECTIVITY RECOMMENDATIONS

Most candidates compiled evidence that referred to theoretical understanding of the connectivity section of items within the specification. Candidates should concentrate on specific recommended solutions to complement the hardware and networking recommendations for the family. N.B. It is not necessary to repeat the recommendations for each member of the family if there is a household solution.

Overall recommendations to candidates for this section would include:

- As with the previous section, remember to put this into context – YOU are working for a company and you would like the family to purchase the items from YOU – avoid directing the family to another provider.
- Avoid theory bookwork here – make sure you concentrate on making specific recommendations for your solution
- Include wired and wireless options
- Discuss the benefits and drawbacks of each option and make your recommendations.
- Include costings for each item
- Consider a connection diagram / animated model

INTERNET RECOMMENDATIONS

Some candidates produced good evidence for this section and centre marks reflected this accurately.

N.B. It is not necessary to repeat the recommendations for each member of the family should there be a household solution.

Overall recommendations to candidates for this section would include:

- As with the previous section, remember to put this into context – YOU are working for a company and you would like the family to purchase the services from YOU – avoid directing the family to another provider.
- Avoid theory bookwork here – make sure you concentrate on making specific recommendations for your solution
- Include Internet, email and VoIP solutions where appropriate
- Discuss the benefits and drawbacks of each option and make your recommendations.
- Include costings for each option

CULTURE AND SOCIETY

Some candidates provided very lengthy evidence for this section giving almost too much detail about specific issues that could affect the family with the use of the recommended items. A summary of issues relevant to the members of the family would be more appropriate – each member of the family exist in different environments in their daily lives and the use of mobile phones and other devices could impact on their individual circumstances. It is not expected for example, that a lengthy description of the effects of radiation on the brain, would necessarily cover this section in isolation. A more appropriate view could include a discussion of relevant issues to the scenario such as: issues of using mobile phones when driving (further opportunities for future accessories sales?); use of mobile phones within school/college environments or trains and buses etc. The relevant issues considered should include all items of recommended hardware.

Overall recommendations to candidates for this section would include:

- Avoid theory bookwork here – make sure you concentrate on making specific recommendations for the appropriate use of your recommended options.
- Consider the benefits of adopting your proposals, and summarise the benefits to the family.

eQUOTE

Some candidates presented their recommendations to the family in what was seen as a very professional on-screen multimedia product. This contained all of the required information to the family and incorporated a variety of relevant multimedia features. This allowed access to the high marks in this section. A small number of candidates presented their on-screen information using very trivial formatting – this did affect the allocation of marks to the candidates.

Overall recommendations to candidates for this section would include:

- The eQuote should:
 - Be professionally formatted in the context of the scenario
 - Introduce you as the contact for the organisation
 - NOT include links to external websites – all links should be self-contained. Remember external web pages frequently change!
- Look at other published examples of multimedia publishing – some on-screen books are textual only, investigate other methods of utilising multimedia to effectively present information.
- You will gain credit for incorporating suitable multimedia components e.g. Images, Animations, Sounds, Videos, again remembering the need for it to be fit for purpose in a business context and relevant to the recommendations. Avoid the use of multimedia content which does not support the recommendations.
- Make the eQuote interesting and exciting for the recipient!

REVIEW

In general, centre assessment of candidate's work for this section was accurate. In order to access the higher marks, candidates should consider the following recommendations:

Overall recommendations to candidates for this section would include:

- Use subheadings...
- State sources of information.
- if web-based state URL and date information retrieved
- Comment on your own performance
- How did you feel you performed in completing this coursework?
- What skills did you develop?
- What difficulties did you encounter?
- What would you do differently or improve next time?
- Compare your eQuote to other methods of electronic communication of similar information
- Make sure you spell-check and proofread your work.
- Use appropriate technical terminology in your review

ePORTFOLIO

There are no specific marks for an eportfolio, however it would be seen as good practice to have an opening screen with the intended audience being the assessor / moderator. The following links are suggested:

- Requirements Specification
- eQuote to the family from the organisation containing:-
 - Hardware Recommendations
 - Networking Recommendations
 - Connectivity Recommendations
 - Internet Recommendations
 - Overall Costing within budget
- Culture and Society
- Review

AICT 5 – eProject

Introduction

It has been very encouraging, once again, to see candidates using industry standard project management software in a realistic environment and, during this examination series, there were many examples of excellent use of this software. Similarly, the standard of the spreadsheet models was, on the whole, very high and it was pleasing to see how candidates had developed skills from the AS part of this qualification.

There were a full range of marks awarded across all grades and every centre had heeded the clear warnings in the specification (and reiterated at INSET) about the requirement to use specialist project planning software which had been an issue with some centres in the early series of this qualification. The majority of centres used Microsoft Project and centres that used this software generally used it effectively and candidates were able to demonstrate a high level of capability. Some centres used the free products available such as Gantt Project and Open Project and, whilst there appeared to be greater variation in its use, some candidates were able to score highly.

Outside Controlled Conditions

- The variation in the presentation of agenda and minutes was not an issue, but again, candidates and groups should be given guidance in the content of these important documents, particularly of minutes. At the very least, these should contain action points with named individuals to ensure that work is completed by the next meeting. In the best examples, minutes were professional, detailed and focussed. In the worst examples, they tended to be vague, non-specific and brief with a strong suggestion of having been written retrospectively. Candidates should be encouraged strongly to write the minutes immediately after the meeting to ensure that they are an accurate record of what went on in the meeting. It appeared, in some instances, that the minutes were an after thought and were simply a narrative of what went on in the meeting. In a small number of cases, there were more agendas than minutes.
- In some extreme cases, groups had as few as 2 meetings and, at the other extreme, as many as twenty. What is clear from both of these examples is the lack of understanding of the importance of the meetings as being a focussed environment for establishing the basis for the work which candidates will pick up individually during the controlled conditions.
- Whilst it is normal practice for different members of the group to have specific responsibilities, one of which may be the development of the prototype spreadsheet based on the requirements known to date, it is essential that all members of the group have some input into the development of the model. It was clear once again that, in some cases, an individual in a group took sole responsibility for the development on the prototypes which meant that the other members of the group struggled to implement the Revised Client Requirements in the controlled time as they appeared to have very little knowledge of the workings of the system. Consequently, candidates achieved very poor marks for the 'Project' section.
- There was some very good practice visible and it was clear that candidates who made full and effective use of the group work outside of the controlled conditions gave themselves every opportunity of achieving high marks in the 15 hour controlled task.

Problem Definition

- Candidates were, on the whole, able to produce a set of clear objectives based on the needs of WrapitUp Removals, as presented in the scenario, and based on any assumptions made by the candidates. To award marks in Mark Band 3, however, candidates must indicate how these will be measured. This is difficult in controlled conditions, but candidates would be expected to identify some success criteria for each objective which will be used to assess the success of the solution.
- Most candidates colour coded their Individual Problem Definition to show the changes between the work produced in the group work stage and the individual work produced inside the controlled conditions and this was most useful in the moderation process. Candidates are expected to redefine the scope of the whole problem in light of Revised Client Requirements and reappraise the impact of these requirements on the whole project. In some cases, however, candidates simply added the Revised Client Requirements to their individual Problem Definition almost word for word without considering the wider implications of these changes.
- Any assumptions made by the candidate must be clearly explained. A number of aims are clearly identified in the scenario, but further aims could be identified and developed based on the research undertaken at the group work stage. In the best examples, candidates were able to break down the aims from the scenario and enhanced these considerably by widening the scope of the project based on their research into the problem area. Weaker candidates tended to just focus on the aims given in the scenario.

Project Organisation

- A variety of Project Planning software was used by centres. The most common program used was Microsoft Project, but a number of free software titles were used and these included Gantt Project and Open Project.
- There is a clear requirement that candidates make use of specialist project planning software for this unit and use this software to manage their time during the 15 hours controlled time. It is not necessary for candidates to show evidence of project planning of the group work stage. Whilst it is acknowledged that this may be good practice and that some centres may use this as part of their teaching of the project management software, this must not be done at the expense of the detailed planning that is required for the 15 hours. In some cases, detailed plans were presented for the whole unit, including the group work period, but this resulted in the planning of the 15 hours being superficial and lacking the depth required for awarding marks in the top mark band.
- In the best examples of work, candidates were able to use project planning software effectively and were able to exploit the features of the software to both plan for the 15 hours of the controlled time and communicate their progress. For example, these candidates used features such as dependencies, resources and notes, amongst other things. Weaker candidates used the project planning software superficially.
- Candidates are expected to produce a number of versions of their plan and to communicate their progress throughout the 15 hours controlled time. Candidates should be encouraged to use the Notes feature of the software to explain their decision making process throughout the 15 hours. For example, if a subtask took longer than expected, they should explain how they will make up that time by reducing the amount of time spent on some other subtasks, or by using any of the contingency time that had been built into the plan. Similarly, if a subtask took less time than expected, they should describe how they will spend the time that has been gained on other aspects of their work.
- In the best examples of work, candidates planned contingency time in their initial plan and also set 'checkpoints' at regular intervals throughout the 15 hours. These checkpoints were used to assess their progress to ensure that they were on target for completion of the project.
- Candidates should be reminded that it is not necessary to produce pages and pages of screen dumps showing their use of the Project Management software as this wastes valuable time during the controlled conditions. Candidates should provide the actual files from the Project Management software so that they can be accessed by moderators. Similarly, the exporting of plans in PDF format (an option in Microsoft Project) should be discouraged as the actual files are preferred.

The Project

- The majority of candidates were able to implement the Revised Client Requirements and there were some outstanding solutions to the given scenario.
- Some candidates, however, appeared to struggle with the implementation of the Revised Client Requirements during the controlled time, meaning that their spreadsheet models had not really developed beyond that produced at the group work stage. From scrutiny of the minutes in such cases, it appears that a single member in the group took sole responsibility for the development of the prototypes during the group work stage and that there was not a shared understanding of how the prototype was developed by all members of the group. Whilst it is normal for tasks to be shared in the group work stage, it is essential that all members of the group are involved in the development of the prototypes so that they have the necessary expertise to develop the model in light of the Revised Client Requirements when working individually.
- In other cases, candidates implemented a fairly elementary solution to the Revised Client Requirements based around some basic changes to a single worksheet and did not integrate these new requirements into the whole system. This was less of a problem than in the previous year, but was nonetheless still a characteristic of some of the weaker candidates' work. In order to achieve high marks in this section, candidates are expected to fully embed the changes by modifying the *whole* of the spreadsheet model in light of the new requirements.
- Centres are reminded that the marks awarded for 'The Project' are based on the way in which the candidate develops the model from the end of the group work stage to encapsulate the Revised Client Requirements.

Review

- A number of candidates did not devote sufficient time to this section of their work and did not recognise that this represented 20% of the total number of marks available for this unit. Based on this, candidates should spend approximately 3 hours on this review and should ensure that they cover all aspects detailed in the Specification.
- Some candidates produced very long reviews which were mainly based around comments on screen dumps, often at the expense of quality evaluation and review.
- Some candidates produced reviews which were superficial. In some cases, the review was more of a reflective 'diary' of what happened during the 15 hour controlled conditions. In these cases, candidates were penalised.
- In the worst examples, candidates presented a Review of approximately half of a page and a Centre awarded marks in the top mark band.
- In the best examples, candidates produced detailed, insightful and honest reviews at both the length and level of extended writing expected at A2.

Presentation

- In most cases, candidates produced excellent ePortfolios which were used effectively to demonstrate evidence. In some cases, however, high marks were awarded, even though there were some broken links which necessitated browsing through the folder structures.
- A number of candidates chose not to use the given ePortfolio template and developed their own multimedia ePortfolios using buttons and graphics. Whilst laudable, candidates would be wise to recognise the small number of marks available for this and concentrate their efforts in the controlled time to other aspects of this Unit which attract more marks. Candidates can still be awarded 5 marks for using the given ePortfolio template and the emphasis should be on the efficient demonstration of evidence linked in an appropriate format, rather than the appearance of the ePortfolio itself. Candidates can, of course, expand the given ePortfolio template if necessary to afford them every opportunity to demonstrate the work that they have undertaken for this unit.
- Candidates should be discouraged from password protecting documents that are linked from their ePortfolios.

AICT 6 – eStudio

General Remarks

This was the most popular of the A2 project units and many very good eportfolios of work were seen. Centres had generally ensured that their candidates had access to a range of suitable software and the skills to produce effective graphic and multimedia products.

The unit requires candidates to produce both graphic and multimedia products and for this series was based on the 'Vive O' scenario.

Requirements Specification

Produce a requirements specification document to summarise:

- **the purpose of the campaign**
- **measurable success criteria related to the campaign objectives**

Produce a test plan to give details for testing the final products.

Most candidates produced an accurate summary describing the purpose of the campaign and were able to list a series of success criteria based on the given campaign objectives. As in previous years identifying success criteria that were both realistic and measurable proved to be a difficulty and candidates were not penalised at moderation if this was not achieved.

The majority of candidates produced test plans that provided for objective testing, where this was possible e.g. length of video, navigation of website etc. and subjective testing of graphic outcomes, usually involving peer surveys. In several cases the results of the subjective tests would have benefited from the opinions of other groups less connected with the project.

Graphic Design

Produce a design log for the required graphic products to include stimulus material, initial ideas, illustration of their development and related design decisions.

Include details of elements and tools and techniques required for further development of the proposed designs.

Most candidates presented initial ideas and some illustration of their development. The recording of stimulus materials and the explanation of design decisions were areas of noted improvement, but there were examples where significant changes in the designs were illustrated without any accompanying explanation.

In this series more candidates addressed the requirements to include details of elements for further development and demonstrated their knowledge of the available software by identifying the tools and techniques they intended to use in the development of their work.

Multimedia Design

Produce a design log for the required multimedia products to include stimulus material, initial ideas, illustration of their development and related design decisions.

Include details of components and tools and techniques required for further development of the proposed designs.

Again most candidates presented initial ideas and some illustration of their development and recorded stimulus materials, but the explanation of design decisions remains an area for future improvement.

The use of storyboards and timelines in the design of multimedia products, such as the video advert and animation, is another area for further development that should be to the benefit of the final outcomes, as is the early identification of the requirements for any accompanying sound track.

In general the graphic design work tended to be more detailed, with only a minority of candidates identifying the tools and techniques they intended to use in the development of their multimedia work.

Graphic Products

Carry out prototyping and testing to develop the final graphic products. Prepare evidence of prototyping and testing for your design log.

Most candidates provided screen shots that confirmed the software used and some extensive records, comprising step-by-step screen shots of the production process were seen. The most successful candidates were more selective and presented screen shots to demonstrate significant developments and the use of software tools that they had found to be particularly effective.

Vector based logo for the new drink, based on the product name

Many candidates produced logo designs based on the given product name, although a variety of alternative names were used with some very imaginative strap lines. Most candidates included clear evidence of the development of their logo ideas although several candidates would have benefitted from obtaining useful feedback on their work at an earlier stage.

The most successful candidates produced professional designs that were clearly related to the new product and given audience and that included graphic features and colour combinations that set a theme for the campaign products.

Vector based designs for the bottle and container with images showing the bottle and container in use

The hints and tips document issued in support of this brief referred to 'a bottle or container' and candidates who adopted this approach were not penalised at moderation, although most candidates produced designs for both a bottle and a container.

Many effective graphics of original bottles were seen, although in some instances the unusual shape adopted for the bottle detracted from the overall effect, particularly when illustrating the product in use.

Most candidates made good use of a 3D vector tool to produce their bottles, and apply labels, surface finishes and highlights with varying degrees of success. Some excellent final drawings were seen and several candidates decided to export these into a photo-editing package to produce a realistic image of the bottle in use. Less successful approaches involved the use of photographs of an existing bottle, with a new label applied, edited into an existing image.

The outcomes for the container were similar with, again, some excellent drawings of cans etc. created and re-used in photo editing software to illustrate the product in use.

An advert for a fitness magazine and a poster displayed on the side of a bus, both to promote the new drink.

Many candidates re-purposed their 'bottle in use' image and, by adding text and their logo, produced an effective advert for a magazine. Some candidates would have benefited from reviewing similar adverts in professionally produced magazines before attempting to produce their own. Surprisingly only a small minority of candidates decided to illustrate their adverts insitu on a magazine page.

The bus poster produced similar results, although most candidates did use an image of a bus to illustrate their designs insitu. The bus tended to dictate the size and proportion of the posters, although the most effective posters seen were not constrained by the different areas available but used software tools to adjust layers, transparency etc. and enable window areas to be incorporated whilst retaining the realism of the image.

A net for a flat pack carrier for six bottles and an image of the bottle carrier in use

The net provided an opportunity to demonstrate accuracy in vector work and several candidates achieved this, although many drawings without titles, dimensions and scale were seen. The most successful nets were closely based on standard 'supermarket' bottle carriers, with colours, logos and other features applied to fold correctly and customise the product.

The image of the carrier in use was a further opportunity to demonstrate photo editing skills, although the poor quality of the model carriers produced from the net often detracted from the final image. There was little evidence of use of software tools to 'touch up' the photographs of models before using them in the final image.

Three items of merchandise to promote the new lead character

Some imaginative products were seen with the more successful candidates taking the opportunity to demonstrate their photo-editing skills by including well formatted images of their items in use. In other examples candidates presented very simple designs and demonstrated only limited software skills by only superimposing their logo without further editing.

Multimedia Products

The overall impression from moderating the multimedia work presented for this series was one of work that had been produced when time was limited and with deadlines approaching. However, some good products were seen, but the standard of the supporting evidence of the development of these products remains an area for improvement.

A relevant timeline animation for use on the website

The intention of this product was to produce an asset or assets that could be used to improve the user experience provided by the website. Most candidates produced tween based animations as required. The products ranged from complete splash screens to animated banners for each page to simple animated logos.

The most successful animations focussed on the product and combined tweens with background transitions that highlighted a feature of the new brand.

A video based, 60 second, commercial about the new drink

A wide range of approaches to the authoring of the commercial were seen. The most successful examples focused on the product and involved both original and secondary video sequences, well timed transitions and synchronised sound with voice over. Less successful commercials included examples of work that omitted to address the advertising purpose and simply comprised video with little editing, context or sound.

3 page website aimed at the 18 - 30 age group to comprise:

- **Home page featuring the animation and commercial;**
- **Sugar free page with details of the new drink and other relevant content;**
- **Exercise page with tips on staying fit and other relevant content.**

Most candidates produced a website of 3 pages that presented the required information. Several candidates included images of their graphic products on the web pages, usually to good effect and many effective animations that had been well integrated within the page designs were seen. A small minority of candidates relied on the use of animated gifs downloaded from secondary sources.

The most successful candidates adapted their work to suit the specified audience, demonstrated skill in the use of roll-overs, transitions etc. and produced web pages with well-designed navigational features, carefully chosen colour schemes, clear fonts and consistent layouts.

Review

Produce a review document that evaluates and suggests improvements covering:

- **the final products**
- **the tools and techniques used • own performance**

As for other units the review was well done in cases where the evaluation of the final products included some consideration of end user feedback, leading to suggestions for further improvement. The reviews of the tools and techniques used ranged from simple descriptions of process to the consideration of the effectiveness of a range of software facilities as required for the higher marks.

The most successful candidates commented on their own performance and identified changes of approach likely to lead to improvement of performance and / or outcomes. They did not include comments about needing more time or vague suggestions about their level of effort and organisation.

ePortfolio

Produce an eportfolio to provide a context and showcase for the campaign products.

Most candidates produced a functional eportfolio that provided access to the products and supporting evidence. In general the eportfolios provided limited context but were usually easy to navigate, although the index pages of some candidate had not been clearly named.

The more successful candidates were able to target their work towards the assessor and design pages that showcased their achievements and highlighted their final products.

AICT 7 – eConnect

The AICT 7 paper is divided into two parts; Part A comprising a one hour on-line examination paper and Part B which is a practical two hour examination. The responses to Part B are submitted on CD.

Part A

General Remarks

Part A of the examination was completed on-line. This did not cause any difficulties for centres.

Remarks for specific responses

- Q.1 (a) Describe the difference between an intranet and the Internet giving one example of information that would be found on Beacon Autocentre's intranet and one example of information that would be found on Beacon Autocentre's web site.

Many candidates did not gain full marks here but most were able to gain marks for the examples of data found on an intranet and the internet.

- (b) Explain the term extranet giving one example of information that could be accessed using an extranet.

Very few were candidates were able to explain an extranet.

- Q.2 (a) Briefly describe two characteristics of a VLAN compared to a LAN.

Some very good answers were seen but other candidates were clearly guessing the answer to this question.

- (b) Briefly describe the characteristics of a Virtual Private Network (VPN) and explain the process carried out to ensure all communication is kept secure.

Candidates failed to describe a VPN but then went on to explain encryption using keys and gained some marks.

- Q.3 (a) Explain how a distributed network achieves efficient use of system resources.

Candidates found this question particularly difficult to answer.

- (b) A third party provider will store all of a company's data and applications, this is known as 'cloud-based computing'. Identify two benefits of cloud-based computing for a company.

Many candidates were able to give benefits of cloud-based networking.

- Q.4 (a) Describe how information is organised on the World Wide Web and how the information can be retrieved and viewed.

Surprisingly some candidates were unable to answer this question.

- (b) Using an example explain the role of a URL and describe the different parts that form a URL.

Many candidates failed to give an example. Candidates should be reminded that giving an example even when not explicitly requested may be beneficial.

- Q5 (a) Describe, using an example, how a business could make use of a blog.

Most candidates were able to give an example of how the company could make use of a blog where information is generally one-way and updated regularly.

- (b) Describe, using an example, how a business could make use of an internet forum.

Again, most candidates were able to give an example of how the company could make use of a forum and distinguish between a blog and a forum where there is a two-way communication about a specific topic.

- Q.6 Describe, with an example, a suitable use for each of the following protocols.

- (a) HTTPS (Hypertext Transfer Protocol)

Many candidates identified the secure nature of this protocol but did not give a relevant example.

- (b) FTP (File Transfer Protocol)

Most candidates were able to describe the protocol but again did not give an example and failed to gain the second mark.

- (c) VoIP (Voice over Internet)

Most gave the example here and gained two marks.

- Q.7 Describe how communication takes place between two work stations, station A and station B, on a bus and on a star network. Recommend which topology, star or bus, should be installed and justify your choice.

This question asked how two stations communicate on each network and to justify the choice of network. To gain high marks on an extended answer question like this, candidates must fully answer the question giving detail and if applicable examples.

Some candidates gave excellent in depth answers and gained high marks while others simply listed advantages and disadvantages of each network topology and failed to gain even middle band marks.

Note that if one station on a bus network fails then the rest of the network can still operate and the central hub on a switched network is unlikely to be a file server and will usually be a switch.

Part B – The Recommendation

General Remarks

The Recommendation part of the examination was completed using network design software and print screen evidence in a word processed document. Candidates typed written responses to some tasks in the same document. This did not cause any difficulties for centres.

The scenario and tasks were of a similar type to previous papers.

Remarks for specific responses

Task 1

Centres should remind candidates that a 'scatter gun' approach of placing all hardware in all rooms will not gain marks as marks were deducted for inappropriately located hardware.

The location of each component is important. Thought should be given to where the servers and switches should be located.

Task 2

This task was worth six marks and candidates were expected to give an extended detailed response. Candidates that just briefly listed advantages and disadvantages failed to gain high marks.

Task 3

Most candidates were able to gain some of these marks. Some candidates failed to recognise that customers would have access to the workstations and the security measures were meant to stop them accessing the data.

Part B – The Implementation

General Remarks

Part B – The Implementation part of the examination was completed using server simulation software and print screen evidence in a word processed document. Candidates typed written responses to some tasks in the same document. This did not cause any difficulties.

Candidates labelled their screen shots as instructed. Centres, however, should encourage candidates not to severely crop their screen shots as evidence may be lost. Also there is no need to reduce the size of the screen shots to make many fit on one page. They are not printed, therefore no paper is saved and it is important that the examiner can read all the detail on the screen.

The examiner must have clear evidence to be able to award marks.

Candidates were expected to create users, computers, groups, folders and set share permissions to meet the given objectives.

Generally most candidates were able to carry out the practical tasks but many seemed unable to justify their choices and failed to refer back to the given objectives.

Centres must direct candidates to read and refer to the objectives when justifying their choices, particularly when deciding on share permissions.

Remarks for specific responses

Some candidates were able to justify and give reasons for naming conventions as well as use them.

Candidates should refer to the given objectives to determine who should be in which group and what permissions each group should be given. Some candidates correctly set the permissions for each of the groups in task 16 and task 17 but were unable to justify their reasons for setting the permissions in task 14 and task 15. These candidates failed to gain high marks.

Candidates should describe the permissions that they are going to set using the correct terminology such as 'Full Control' or 'Read' and not in general terms such as 'update' or 'view' the database.

AICT8 – eLearn

General remarks

As with the units of the practitioner qualification the entry for AICT8 this series was relatively low. The following comments from previous series remain relevant.

In most cases candidates had addressed the requirements of the specification, coded eLearning systems and produced good quality solutions that were appropriate for audience and purpose.

Problem Definition

Most candidates had undertaken some analysis of current practices for the delivery of their learning content. Many candidates were able to use this research to form a problem definition that identified the broad aims and limitations for the proposed eLearning system. Some candidates were able to produce detailed problem definitions and to form clear and measureable criteria for the evaluation of the finished eLearning system.

Where candidates failed to carry out sufficient investigations they struggled to create a detailed problem definition and had difficulty in setting measurable success criteria.

Design an eLearning package

Most candidates were able to produce basic designs for an eLearning system. Many candidates produced designs that were sufficiently detailed to allow the system to be implemented. Some candidates produced comprehensive designs for eLearning systems that were clearly suitable for the intended audience and purpose.

It is important that all candidates consider both the data to be handled and the processes required to produce the eLearning package. These processes should be included in the design section of the work.

It also important that all design work is carried out before the system is created. Candidates should not be given credit for retrospective design work.

Some candidates had given a great deal of thought to the nature of their eLearning systems and the needs of the learners and had created engaging and interesting interfaces and scoring systems.

Create an eLearning package

A range of eLearning systems were seen. Most candidates were able to produce systems that were functional and many produced systems that included well thought out features.

Candidates should ensure that they concentrate on producing an interesting product rather than demonstrating the use of complex code whilst losing sight of the requirements for the system.

Tutorial

The production of the tutorials provides the candidate with an opportunity to showcase their work. Some excellent examples were seen. However candidates should ensure they make the most of the on-screen environment to demonstrate the use of their systems. Candidates should ensure that the tutorials are each directed at their intended audiences.

Test an eLearning package

Some good test plans were seen during the moderation process. Many candidates were able to design effective test data to test both the functionality and logic of their implemented systems.

Candidates should be aware of the importance of the commentary they provide to accompany the testing outcomes. In many cases screen prints of outcomes were seen but the work lacked the discussion required to access the higher marks for this section.

Review

Many candidates provided reviews that comprised narrative rather than evaluative content. Centres should ensure that candidates are aware of the requirements of the specification for the review for this unit. In many cases candidates failed to cover all five of the areas contained in section 8.8 but simply provided a description of their work.

eportfolio

Almost all candidates provided eportfolios that allowed access to their work. Some of the best work was seen where candidates had themed their eportfolios to reflect the context of their eLearning packages.

Candidates should test their eportfolios to ensure that all links will be functional when the work is removed from the network.

AICT9 - eTransact

General remarks

As with the units of the practitioner qualification the entry for AICT9 this series was relatively low. The following comments from previous series remain relevant.

In most cases candidates had successfully addressed the requirements of the specification and had created ecommerce websites that allowed the end user to view and purchase goods. In some cases candidates had presented work of an extremely high standard and are to be congratulated on their outcomes.

Design an eTransact system

Many candidates presented clear designs for the layout of a website intended to present product information, promote user confidence and enable transactions to take place. Some designs included all information required to create the website including clear structure diagrams, proposals for navigation, user interaction and graphic content.

Most candidates had given some consideration to the structures required for efficient storage of all information required to carry out efficient transaction. Some candidates had designed data entry facilities and validation routines.

A minority of candidates appeared to have created retrospective 'designs' for their implementations. Retrospective work should not be given credit, it is essential that candidates create up front designs for their systems.

Create an eTransact system

Most candidates created functional websites that comprised a series of web pages designed to present products. Most of the websites enabled some stages of a transaction to take place. Some candidates created fully functional, easy to navigate websites comprising a series of well-structured web pages that enable efficient transactions.

Many candidates produced structures that stored data and their systems generated some automated output. More successful candidates created efficient data structures that stored all information required to carry out a transaction and provide the consumer with the details expected from a commercial system.

Test an eTransact system

Many candidates appeared to have created prototype systems and had taken on board feedback to allow them to improve their websites. Most candidates had created test plans that would allow them to test their systems. Some candidates had created comprehensive test plans that would allow them to test all areas of their system. The results were often presented with appropriate commentaries.

Provide customer advice

Most candidates had carried out some research into distance selling regulations and the terms and conditions documented on a range of commercial websites. The results of the candidates' research were presented in a variety of ways and some candidates would have benefited from adopting a more professional approach to the presentation of this information.

Review

Some candidates' reviews tended to contain a narrative account of work carried out rather than an evaluation of their finished systems. Candidates would benefit from ensuring that their reviews covered the areas contained in 9.8 of the specification.

Eportfolio

The majority of candidates presented their finished systems and supporting evidence in an eportfolio. Most of these eportfolios allowed access to all of the candidate's work. In some cases candidates would have benefited from testing their links to ensure that they worked when removed from the school/college network.



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