GCE EXAMINERS' REPORTS

GCE
APPLIED ICT
AS/Advanced

SUMMER 2017

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APPLIED ICT

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UNIT AICT 1

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 word processing, spreadsheet and database packages. However the ability of a significant minority of candidates to use the software was concerning as their use would have been required to carry out the coursework tasks for AICT 2 as part of their AS studies. Many candidates appeared to be unfamiliar with the layout for standard business documents. **Part A – written paper (40 marks)**

Question 1
Identify two stakeholders of the community shop.   For each stakeholder describe the relationship between the stakeholder and the shop

This question was not answered well by the majority of the candidates. Many candidates were able to identify at least one stakeholder but few could describe their relationship with the shop.

Many candidates stated that employees were stakeholders. The scenario makes it clear that all staff are volunteers from the community.

Question 2
Explain the differences between the use of open and closed questions included in a questionnaire.

Few candidates were able to provide an accurate explanation of the difference between open and closed questions. Many responses demonstrated little understanding of the way in which qualitative and quantitative data can be gathered.

Question 3
Describe how a spreadsheet could be used to analyse and present the results from a survey that used questionnaires to gather data.

This question was answered poorly with few candidates able to identify relevant functions and features. Many candidates talked about multiplication and some even mentioned use of the SUM. It was expected that candidates would draw on their knowledge and understanding gained in AICT2 and provide answers including CountIf(), conditional formatting, pivot tables and the use of charts.

Where candidates were able to identify suitable functions and features most gained high marks for this question.

Question 4
*Describe **one** advantage and **one** disadvantage of using a computerised stock control system in the mini supermarket.*

The current specification requires candidates to have a knowledge and understanding of the functions and advantages/drawbacks of a computerized stock control system. However, candidate responses lacked technical content and many demonstrated little understanding of the way in which a stock control system works.

Question 5
(a) Other than the ability to create relationships, describe the features and functions of a relational database that could be used to handle supplier and product data.

In general, this question was poorly answered well with many candidates failing to gain marks here. This was surprising when all candidates will have completed AICT 2 and should have observed the advantages of structuring data through the use of relationships.

Candidates mentioned how to create relationships and the removal of data duplication rather than the benefits of the use of relationships to handle rather than structure data.

Candidates who described the ability to create forms with sub forms to give views of related data to improve the accuracy of data entry or queries from multiple tables scored well here.

(b) Explain how a relationship could be created between the suppliers and the products.

Many candidates repeated their Part(a) responses here. It was assumed that candidates would be able to describe the process of creating and enforcing the relationship based on their AICT2 work and preparation for Part B of this examination.

Question 6
*Describe **two** ways in which the Internet could be used to advertise the membership scheme*

Most candidates scored well on this question.

Question 7
*Explain, using examples, **one** possible cause of accidental damage and **one** cause of malicious damage that could affect the mini supermarket's data.*

Few candidates gained the four marks in this question. Candidates did not relate their responses to the given scenario. In one instance, a candidate stated 'Tsunami' rather than related suggestions such as inexperienced volunteers enter incorrect data or delating data. Many candidates identified the introduction of a computer virus as accidental damage.

Many candidates wrote about hacking but did not continue to identify a cause of damage. Unless hacking is qualified by a detrimental event such as corruption, deletion or theft it will not be awarded marks.

Question 8
Describe how the manager can ensure that the mini supermarket and its members comply with current legislation that controls the use of data on computers.

It had been thought that this would be an accessible question for all candidates. However, many appeared unable to set their answers in the given context.

Most candidates limited their responses to the Data Protection Act and did not cover the Computer Misuse Act or cover any issues related to copyright thus limiting their marks significantly.

In future candidates would benefit from producing well-written responses with appropriate use of technical terminology.

Part B – Practical tasks (60 marks)

Many candidates were able to access marks for the two practical tasks. However, some candidates appeared to have difficulties in carrying out even the most basic tasks.

Task 1 – Marketing

a) *The mini supermarket has a policy of stocking local produce. Maria is considering including a new range of preserves. She would like you to analyse the results of a survey where local residents have been asked to indicate their preferred choice.*

Many candidates found this task to be accessible. Although, in some instances candidates struggled to graph non adjacent data. Most candidates were able to add titles and axis labels to the graphs.

Candidates who were familiar with the use of absolute cell references and/or named ranges were able to gain high marks for the analysis of the given data.

b) *Maria would like you to present the findings of the survey in a Memorandum*
Many candidates found this task to be accessible. However, a surprising majority were not able to lay out the document as a standard memorandum.

Task 2 – Events

a) *Maria has details of **bookings** for **fundraising_events**. These details now need to be organised.*

Many candidates were able to recognise the need to split the data into a **bookings** table and a **fundraising_events** table as indicated by the emboldened text in the stem of the task. It was pleasing to see many candidates used action queries to achieve this, gaining additional credit for their work.
However, a significant minority of candidates chose to ignore the advice and attempted to split their data differently. This resulted in an incorrect relationship between the tables.

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. A minority of candidates attempted to add additional fields to create relationships. Candidates should ensure that they remove any duplicated data.

Few candidates gained all marks available for the use of appropriate application of validation rules.

b) *A deposit of £8 is made with every booking. Personalised reminders now need to be sent for bookings that have not been paid in full for the fundraising events taking place in June.*

Where candidates had structured the data correctly they were able to create a query that drew data from both tables. Many candidates were able to enter the correct criteria for the query. A pleasing number of candidates were able to set the calculated fields correctly. Most candidates attempted to set up the required mail merge document. Fewer candidates were able to insert additional data to create a formal business latter.

Many candidates struggled with the calculations required to produce correct totals on the payment due field. However, a majority of candidates were able to set the payment received to FALSE.

c) *In order to raise as much money as possible from the fundraising events, the Founders would like an analysis of tickets sold for events CE0001 and CE0003.*

Many candidates were able to set up the query to identify bookings for the two events. In general, however, candidates did not include sufficient fields in the query to be able to create a report with the correct information.

Few candidates were able to format the report correctly. In particular candidates could not include the required information on each page or introduce the correct page break.

d) *In a word-processed document, name two additional tables that should be included in the booking system. Explain how the new four table database would minimise duplication of data.*

Extremely few candidates were able to gain full marks for this section of the work. It is hard to understand how candidates who are gaining good marks for AICT2 are not able to explain the underlying purposes of relational databases.

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UNIT AICT 2

General Comments

Many good projects were seen during the moderation process, with a large number of centres marking to the appropriate standard.

Most centres completed the required paperwork correctly. In future, it would be helpful if the centres' assessors could complete the comment/justification sections of the cover sheet to explain their marking decisions. Centres may find it useful to note separately the marks awarded for the spreadsheet and database elements of the design and implementation of each.

SPECIFICATION

Many candidates were able to analyse the scenario and produce a working specification summarising the intended outcomes of the coursework. However, in some instances, it appeared that the candidates did not have the necessary prior knowledge, understanding and skills in the use of database and spreadsheet software to be able to give sufficiently technical justifications of the methods to be used in the solution.

SYSTEM DESIGN

This section was completed to a good standard by the majority of candidates, however, those candidates that did not have the necessary prior skills were unable to design the processing requirements of the systems.

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. Candidates would benefit from researching standard documentation in order to design effective outputs.

IMPLEMENTATION

Most candidates produced good database systems, including a series of related tables, effective data entry forms and the required outputs. Many implementations included automated facilities such as update queries and macros which improved the HCI.

A significant minority of candidates produced database systems that were too simplistic and failed to produce the required outputs.

Most candidates produced a spreadsheet solution that met the requirements of the scenario. A significant minority of candidates limited their marks as implementations presented monthly summaries listing all employees' pay details rather than the individual documents that would be required in real life.

TESTING

Most candidates achieved some marks in this section of the work. A significant minority of candidates failed to evidence prototyping or the use of feedback to refine their systems. Many candidates failed to test the accuracy of their calculations appropriately. Thorough testing of the logic and the outputs from the systems would lead to candidates scoring higher marks in this section.

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

Candidates who had produced a specification that included measurable objectives completed this section to a good standard. A significant minority of candidates did not comment on their own performance and changes of approach effectively and would benefit from keeping a record of their progress whilst completing the design and implementation sections.

PORTFOLIO

The majority of candidates produce good portfolios to showcase their work.

A significant minority of candidates failed to provide a context for the solutions and supporting evidence resulting and/or the links to products and supporting evidence did not function correctly.

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UNIT AICT 3

AICT 3 eWare

General remarks

In most cases candidates had addressed the requirements of the controlled assignment 'Parkwood House' 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 very low.

Task 1 - Preliminary research

Most candidates presented evidence of Internet based research that addressed the software and hardware requirements indicated in the scenario. The more successful candidates noted why the various items would be relevant to the requirements.

Task 2 – Specification

Most candidates produced technical specifications that covered the hardware requirements indicated in the scenario. As in previous series less successful candidates tended to rely on manufacturers' technical specifications with little editing.

Successful candidates included alternative specifications with some discussion on relative merits and disadvantages, leading to final recommendations based on technical appraisals.

The most successful candidates related their choices to their interpretation of the client's requirements and gave software equal consideration, covering operating systems and application software, as indicated in the scenario.

Task 3 – Enhancements

The scenario should guide candidates towards a selected area for further enhancement, in this case hardware upgrades and/or software that has been designed for the elderly who have limited sight or find using a mouse problematic.

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.

As in previous series 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 analyse the time spent by residents using the new computers. Candidates were 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 and scored high marks in this section, although the standard of annotation was variable.

Tasks 6 and 7- Standard ways of working

Several suitably formatted documents with well summarised information were seen, although less successful candidates tended to include general information, not specifically directed towards the scenario.

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 included charts with questions of increasing technical content leading to the problem being solved or reference to further technical support.

Task 9 - Review

As described in the unit specification candidates were requested to relate their technical specifications to the client's requirements and consider the efficiency of their automated routines. They were also requested to comment on possible changes of approach that would improve personal performance.

Several candidates reviewed work done for all sections of the unit as opposed to concentrating on the areas specified.

Candidates scoring high marks presented evaluative comments about their work without lengthy descriptions of process. They identified changes of approach likely to lead to improvement of performance 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.

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. As in previous series a minority of candidates had re-organised their work folders and files after linking to the templates, or had re-named the template after creating the hyperlinks, and therefore did not provide a working information pack

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UNIT AICT 4

General comments

This series saw a limited number of candidates complete this unit and as such, the comments which follow are partly based on the current series but are also advisory based on previous series and general observations.

The comments and recommendations to candidates should assist in the completion of the AICT 4 projects.

Requirements specification

Candidates should be encouraged to make clear any assumptions or interpretations of the scenario in this section in order to access the higher marks. Not all candidates summarise 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 and address each member of the family separately. The specification should be a single document for the entire family.
- Use sub-headings 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

Candidates often 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.

This scenario made it clear that the family requirements were for higher specification equipment and the available budget was set accordingly. Many candidates chose to spend as little of the available funds as possible and often took a low value option. It was interesting to see that some candidates chose to offer price-range bundles as options for the family – this was seen to be representative of realistic practice.

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

Providing networking solutions for the family and including some schematic diagrams for connections and arrangement of devices is very good practice for this section. All too often, candidates focus upon theoretical understanding of items covered in the specification rather than recommendations for the use and implementation of network hardware for the family. Please note that 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

Candidates still tend to compile evidence referring to theoretical understanding of items within the connectivity section of the specification. Candidates should concentrate on specific recommended solutions to complement the hardware and networking recommendations for the family. Please note that 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

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

Candidates occasionally provide 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 exists 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 (quiet carriages?) 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 issues for consideration and recommendations for the appropriate use of your specified options.
- Consider the benefits of adopting your proposals, and summarise the benefits to the family.

eQuote
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.
- Credit ill be gained for incorporating suitable multimedia components, for example, 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 order to access the higher marks, candidates should consider the following recommendations:
- Use sub-headings:
  - 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

Problem Definition

Most candidates were able to reassess the Problem Definition in light of the Revised Client Requirements and update the document accordingly. Centres are increasingly adept in instructing candidates to show all changes that have occurred in the controlled time in a different colour to aid both the centre marking and the moderation process.

There were some interesting interpretations of the Revised Client Requirements, those candidates who fully considered the wider impact of the new requirements and fully analysed and embedded them into their Problem Definition did, on the whole, go on to produce better solutions in latter stages of this unit. Those candidates who limited their thinking and imagination at this stage did not progress the solution as well as they might have, and this affected both the marks in this section and in subsequent sections.

Project Organisation

Centres are again reminded that marks can only be awarded for the candidates' use of project management software for the fifteen hours' controlled time.

In most cases, there was good use of the project management software used by centres. In only a small number of cases, candidates used this software as a means of recording what they had done, rather than a forward planning tool. In other words, they were using the software more as a diary rather than a project management tool and this needs to be strongly discouraged. Candidates are expected to use the project management software to plan how they expect to use the fifteen hours controlled time and this serves as the baseline plan. In this plan, they should consider the main tasks, sub-tasks, critical path including predecessors and any resources that may be needed, along with any checkpoints and contingency that may be appropriate.

As the baseline plan changes as the Revised Client Requirements are introduced, candidates must update their plan accordingly. Similarly, as candidates progress through the controlled time, they will need to update their plan as some sub-tasks take less time than expected and some will take more. Candidates must also communicate their progress, preferably by using the 'notes' section of the project management software. This should not simply be an account of what they have done, but should consider the consequences of, for example, a sub-task taking longer than expected and explain how they will make up this time.

The Project

As in previous series, there were some excellent, imaginative and innovative solutions to the Revised Client Requirements this year. There were a number of superficial solutions, however, the majority of candidates were able to embed the new requirements into the whole of their solution.

Many candidates clearly found it difficult to implement a date checking feature. Many models had hard-coded formulae which could not cope with times outside the window of the controlled assessment.

Centres are reminded that what they are marking is the way in which the candidate has developed the solution in light of the Revised Client Requirements. Therefore, it is the way in which the candidate has developed the solution as an individual during the controlled time that determines the mark for this section.

As in previous series, it was clear that some candidates struggle with implementing the Revised Client Requirements in Excel and this is mainly because they do not engage in the development of the prototype solution during the group work stage sufficiently. Without fully addressing the Revised Client Requirements, candidates can expect to have a very low mark for this section.

Review

Reviews were occasionally more of a reflective 'diary' of what happened during the fifteen-hour controlled conditions rather than a focused review using proper evaluative writing. Most centres now ensure that candidates cover all of the headings from the specification which is encouraging, but there is still scope for candidates to develop a more evaluative style of writing. Generally there was a concern over the quality of evaluative writing and the fact that short, non-evaluative reviews have on occasion, been awarded high marks by centres.

Presentation

Centres are again reminded to take care in ensuring that the links within the ePortfolio are not pointing to networked drives and that the ePortfolio works as expected after burning it to the disk. In some cases, this problem has resulted in centres awarding five marks for ePortfolios which worked, whilst the work was on the network but that failed to work after transferring the work to disk.

A small number of centres do not use the given template for the ePortfolio and prefer to get candidates to create unnecessarily complex HTML ePortfolios. This is a distraction for the candidates and often results in broken links. Furthermore, candidates would be better employed focusing their efforts on work that will directly yield higher marks.

It is impossible for the WJEC to moderate candidate work where aspects have been password protected. Candidates *must* be discouraged from password-protecting documents that are linked from their ePortfolios.

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UNIT AICT 6

General Remarks

As in previous series 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 'HeatWave' scenario. The requirements of the scenario were presented under the following headings;

Requirements Specification

Most candidates scored well in this section, producing an accurate summary describing the purpose of the campaign and listing 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 fully achieved.

Most 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.

Graphic Design

Most 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

The use of storyboards and timelines in the design of multimedia products was an area of improvement over previous years and many candidates identified the tools and techniques they intended to use in the development of their video advert and animation.

Graphic Products

As in previous series 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.

The set of graphic products for the Heatwave campaign comprised;

Vector-based drawing of an original design for the Heatwave label, with logo

Successful candidates produced designs that were clearly related to the scenario and included graphic features and colour combinations that set a theme for the campaign products.

Less successful labels tended to be basic in terms of use of software and provided a less obvious link to the 'sea and sun' scenario.

A design for a HeatWave gift bag

- *vector-based net to represent a fold flat gift bag*
- *finished gift bag with added text and images*
- *representation showing the finished gift bag in use*

The gift bag 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. Finished gift bags varied in quality, but were generally well done, with many candidates adding colour gradients and suitable text.

The representation of the gift bag in use was an opportunity to demonstrate photo editing skills, and some successful and realistic representations were seen. As in previous series some use of layering to provide foreground features would have enhanced many of the final representations.

A set of three paper based products combining text and image.

- *an advertisement for the 2017 range for publication in a 'glossy' fashion magazine*
- *a design for a backdrop for a 'Heatwave' shop window display*
- *a 'celebrity' bill board poster*

The magazine adverts and bill board poster tended to be the most successful of the graphic products, with several effective combinations of text and image over suitable backgrounds and with some candidates making good use of distortion to shape images of their graphics and create realistic representations of the products in use.

Some scope for improvement in the image editing work was noted where, again, layering could have been used to provide foreground features and thereby further enhance the final representations of the posters.

Many of the shop window displays were well done, with many imaginative designs presented within images of suitable shopfronts.

Designs for three items or accessories to be part of the 2017 range, to include:

- *branded sun glasses*
- *an item of clothing*
- *branded footwear.*

In previous series the representations of similar products have been used to demonstrate techniques, such as control of transparency and shadow, and features such as reflection and mirroring.

For this series, many candidates presented simple designs for the branded items and demonstrated only limited software skills by superimposing their logos onto images of products without much additional editing.

Multimedia products

The set of graphic products for the HeatWave campaign comprised;

Timeline animation illustrating the brand's 'sun and sea' theme.

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 most successful animations comprised objects and backgrounds that were well matched to the brand image. Less successful animations relied on motion paths and did not feature purpose made assets with moving parts.

45 - 60 second promo movie featuring the celebrity launch event.

A wide range of approaches to the authoring of the promotional movie were seen. Many successful examples were seen that focused on a local event, involved both original and secondary video sequences, with well-timed transitions and synchronised music with voice over for at least some of the content.

Heatwave website to comprise:

- o *Home page, featuring the logo, the animation and images of the magazine advert in use*
- o *Products page, including the gift bag, shop window display and accessories in use*
- o *Celebrities page, featuring the launch event movie and bill board poster.*
- o *'Made in Britain' page with information on the benefits of sourcing materials locally*

Most candidates produced a website of 4 pages that presented the required content. Several candidates included images of their other graphic products on the web pages, usually to good effect and many appropriate animations that had been well integrated within the page designs were seen.

The most successful candidates addressed all the stated requirements for content and demonstrated skill in the use of roll-overs, transitions etc. to produce web pages with well-designed navigational features, carefully chosen colour schemes, clear fonts and consistent layouts.

However, as in previous series, some examples were seen where navigation between pages

did not work as intended, small default fonts had been used and objects had not been placed on the pages to achieve a coherent layout.

There were also a limited number of examples where images and other assets could not display because they had been moved after saving of the web pages.

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 examples 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 lack of time or effort.

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.

Several of the eportfolios provided limited context but most were easy to navigate. The more successful candidates targeted their work towards the assessor and design pages that were clear and that highlighted their final products.

APPLIED ICT

General Certificate of Education

Summer 2017

Advanced Subsidiary/Advanced

UNIT AICT 7

Introduction
The Unit 7 examination is divided into two parts. Part A is a one hour online theory examination paper and part B is a practical examination with candidates required to demonstrate the application of knowledge and understanding.

General Remarks
Most of the candidates demonstrated a good understanding of the specification. Questions attempted data was unavailable this series for part A. Many candidates were well prepared and many excellent answers were evident. There was evidence also that some candidates had been well prepared for the majority of the practical programming elements found in part B, however, performance when implementing the most complex parts of the network (file access rights for differing directories) was mixed.

Comments on Individual Questions:

Part A:
Q1: Candidates were required to explain the difference between STP and UTP and give advantages of fibre optic cables. Most candidates demonstrated a good understanding here and used technical terminology accurately.

Q2: Candidates were required to state the roles of network servers. Candidates were unsure of the role of a proxy server on a network

Q3: Candidates could demonstrate a good level of understanding on the function of various network devices.

Q4: This question was generally not very well answered, candidates generally knew the benefits of a star network topology, however, they could not explain how this topology provided these benefits.

Q5: This question was also generally answered poorly, candidates knew of packet switching networks but could not give advantages over circuit switched networks.

Q6: This question was generally well answered.

Q7: This extended question was generally poorly answered. Candidates had some knowledge of a peer to peer network and a client server network. However, they could not compare the two nor state reasons for installing one over the other. The standard of technical terminology and the ability to create coherent arguments was poor.

Part B:
Part B of the examination is conducted using network design and server simulator software. Candidates create two new word processed documents called the recommendation and the implementation. They then use print screen and typed evidence to demonstrate practical knowledge, skill and understanding of the design and implementation of computer networks.

The Recommendation: Candidates were required to design a network using provided components to satisfy the requirements of the brief. They were then required to give advice on other aspects of the network such as securing the networks connectivity and software. Most candidates could use the simulator well and placed appropriate network hardware in suitable locations. A minority of candidates however attempted to place too many or unnecessary pieces of hardware onto the plan.

The Implementation: Candidates are required to use network management simulator software and implement a network to satisfy the requirements of the brief. The network management simulator software allows for the creation of users, groups, folders, share permissions and shared printers. All of these tasks were assessed in the summer 2017 paper. Generally candidates could use the simulator well, however, they could not always explain or justify their choices. Also, a minority of candidates could not set file access permissions for folders. Finally the section asking them to justify the file access permissions for groups was poorly answered by most candidates, again here as in Part A, it was due to a lack of technical terminology in the candidates answers.

Centers are reminded that they must submit the candidates responses to Part B to the WJEC as quickly as possible and at the very latest by 5 working days after the end of the examination.

APPLIED ICT

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UNIT AICT 8

General remarks

As with the other units of the practitioner qualification the entry for AICT8 in this series was relatively low and from centres able to support their candidates to address the programming aspects of the unit specification.

All candidates had chosen to produce their programs using Visual Basic. In most cases candidates had produced good quality solutions that were appropriate for audience and purpose. Several excellent examples of original learning systems were seen, with solutions targeted at a young audience tending to be the most successful. In general, the candidates' work was of a pleasing standard with many solutions clearly aimed at the chosen audience.

Problem Definition

Most candidates had undertaken some analysis of current practices for the delivery of their learning content and were able to use this research to form a problem definition that identified the broad aims and limitations for the proposed eLearning system.

The majority of candidates were able to produce detailed problem definitions and to form clear and measureable criteria for the evaluation of the finished eLearning system.

Design an eLearning package

Many candidates produced designs that were sufficiently detailed to allow the system to be implemented by a competent third party. Some candidates produced comprehensive designs for eLearning systems that were clearly suitable for the intended audience and purpose, with due consideration of data, processes and user interaction.

Create an eLearning package

A range of eLearning systems was seen. Most candidates were able to produce systems that were functional and many produced systems that included well thought out features, including engaging interfaces and interesting scoring systems.

Tutorial

Some excellent tutorials were seen. In these examples the candidates had made good use of the on-screen environment to demonstrate the use of their systems and had ensured that the tutorials were directed towards each of their intended audiences.

Test an eLearning package

Many candidates were able to design effective test data to test both the functionality and logic of their implemented systems, although, as in previous series, several examples were seen, where test documents lacked the discussion of results required to access the higher marks for this section.

Review

This section was an area of overall improvement with fewer candidates providing reviews that comprised narrative rather than evaluative content and with most candidates demonstrating an awareness of the requirements of the specification for the review for this unit.

In a minority of cases candidates failed to cover all five of the areas contained in section 8.8 of the specification, but simply provided a description of their work.

Eportfolio

Most candidates provided functional eportfolios that had been themed to reflect the context of their eLearning packages.

APPLIED ICT

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UNIT AICT 9

General remarks

As with other units of the practitioner qualification the entry for AICT9 this series was relatively low.

All centres following this unit had addressed the difficulties experienced in previous years and had adopted realistic solutions for presenting working versions of the candidates' websites for external moderation.

As in previous series most candidates successfully addressed the requirements of the specification and created ecommerce websites that allowed the end user to view and purchase goods.

Design an eTransact system

Many candidates presented clear designs that included all information required to create the website including clear structure diagrams, proposals for navigation, user interaction and graphic content.

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

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 stages of a transaction to take place. Many candidates created fully functional, easy to navigate websites comprising a series of well-structured web pages that enable multiple purchases in a single transaction.

Many candidates created efficient data structures that stored all information required to operate a 'shopping basket' and carry out a transaction and provided the consumer with the details expected from a commercial system.

Test an eTransact system

Most candidates had created comprehensive test plans that enabled them to test all areas of their system. The test results were often presented with appropriate commentaries.

Provide customer advice

As in previous series 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 generally presented as part of the transactional website, as required.

Review

This section was an area of overall improvement with fewer candidates providing reviews that comprised narrative rather than evaluative content and with most candidates demonstrating an awareness of the requirements of the specification for the review for this unit.

In a minority of cases candidates failed to cover all areas contained in section 9.8 of the specification, but simply provided a description of their work.

Eportfolio

Most of the candidates' eportfolios were fully functional, although, in some cases candidates would have benefited from testing the navigational links to ensure that all work could be accessed when the completed project was removed from the school/college network.

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