GCE EXAMINERS' REPORTS

APPLIED ICT
AS/Advanced

SUMMER 2015

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APPLIED ICT

General Certificate of Education

Summer 2015

Advanced Subsidiary/Advanced

UNIT 1: eBUSINESS – GAINING SKILLS IN eBUSINESS

Principal Examiner: Jennifer Gillies

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 apply their knowledge of ICT to 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 this 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)

Q.1 (a) *Identify **one** advantage of home working for the trainers.*

This question was answered well by the majority of the candidates, with many identifying cost savings and carbon footprint reductions.

(b) *Identify **two** disadvantages for the company of the trainers working from home.*

Few candidates scored well on this part of the question. Many candidates provided unrealistic answers such as a lack of equipment to carry out the work.

Q.2 (a) *Explain what is meant by a one-to-many relationship.*

Few candidates were able to provide an accurate explanation regarding the one-to-many relationship, with many stating ideas such as: by splitting the data it was easier to read.

(b) *Describe two benefits of dividing the data into separate tables lined by relationships when using a database application.*

Again, few candidates were able 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.

Q.3 *Describe how **two** functions or features of a spreadsheet application, other than the SUM function, could be used to create a user-friendly system for the trainers to record the details of each session.*

This question was answered poorly, with few candidates able to identify relevant functions and features. Many candidates talked about multiplication and some even mentioned the SUM function that had been ruled out in the question. Again, it was expected that candidates would draw on their knowledge and understanding gained in AICT 2.

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

Q.4 (a) *Describe **one** method other than a standard username and password, which the company could use to ensure that only employees can access the data.*

Many candidates provided good responses to this question, including the use of double authentication and biometric technology.

(b) *Describe two different methods the company could use to back up the data held by the computer system.*

A minority of candidates were able to give valid technical descriptions of two methods and scored well on this part of the question. However, many candidates are still describing methods that would be used for small amounts of data such as flash drives and CDs.

Q.5   *Describe, in detail, **two** ways in which the trainers could use technology to send copies of the handwritten documents to Jo at the office.*

In general, this question was answered well, with candidates of all abilities accessing marks here.

Q.6   (a)   *Name the law that prevents one copy of software being loaded onto multiple devices.*

Few candidates were able to name the appropriate law with the majority state the Data Protection Act.

(b)   *Describe two measures that software companies use to prevent unauthorized sharing of software.*

Most candidates continued with the DPA theme to respond to this question, failing to gain marks. A minority of candidates who had identified copyright in part (a) went on to gain good marks in part (b).

Q.7   *Describe **two** facilities provided by a management information system and explain how the company could use these facilities to expand the business.*

Few candidates gained the four marks in this question, with many failing to gain any marks at all. Candidates still do not seem to be aware of the nature or function of a management information system and weak answers were seen by all examiners.

Q.8   *Identify relevant primary and secondary sources that could be used to identify teachers' training needs. Describe methods that could be used to gather information from these sources. Explain the advantages and disadvantages of each method.*

It had been thought that this would be an accessible question for all candidates. However, many appeared unable to set their answers in the context of the training company. A significant number of candidates were unable to distinguish between sources and methods.

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 – Human Resources

(a)   *The Human Resources Manager would like you to analyse the course evaluations provided by the delegates.*

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 work on the bonus worksheet.

(b)   The *Human Resources Manager wants to send personalised memos to each team leader.*

Many candidates found this task to be accessible. However, a surprising minority were not able to set up the mail merge from the spreadsheet.

Task 2 – Finance Department

(a)   *The finance department has details of **bookings** made by **schools**. These details need to be organised.*

Many candidates were able to recognise the need to split the data into a **bookings** table and a **schools** 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)   *The finance department sends an invoice to each school to request payment for training provided. There is a charge of £10 for each delegate that does not have their own tablet computer.*

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 report. Fewer candidates were able to insert the correct page break.

Many candidates struggled with the calculations required to produce correct totals on the invoice. However, a majority of candidates were able to set the payment date.

(c)   The *finance department realises that the database would be improved with the inclusion of an additional field, "Date Invoice Sent".*

Very few candidates were able to gain full marks for the evaluation.

- Many candidates were not able to identify the issues with the current system in that an invoice would be sent each day until payment was received.

- Few candidates were able to explain how the additional field would solve the problem.

- Only a small number of candidates were able to identify the need for an update query.

General Certificate of Education

Summer 2015

Advanced Subsidiary/Advanced

UNIT 2: eSKILLS – MANAGING eBUSINESS DATA

Principal Moderator: Linda Jennings

General remarks

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

The majority of candidates completed this section to a good standard; however, those candidates who did not have the necessary familiarity with the software packages were not able 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.

Implementation

Most candidates produced good database systems, including a series of related tables, effective data entry forms and the required outputs. A significant minority of candidates produced database systems that were too simplistic and failed to produce the required outputs.

Although there was evidence of researching standard documentation, many candidates failed to replicate their designs as outputs from the database.

The quality of the spreadsheet solution continues to improve, with the majority of candidates producing systems that met the requirements of the scenario.

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 use in both the database and spreadsheet solutions. Many candidates, however, 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 produced good portfolios to showcase their work. However, it was noted that some centres gave candidates a template, hence limiting the marks that could be awarded.

APPLIED ICT

General Certificate of Education

Summer 2015

Advanced Subsidiary/Advanced

UNIT 3: eWARE – HARDWARE AND SOFTWARE

Principal Examiner: Martin Gillies

General remarks

In most cases, candidates had addressed the requirements of the controlled assignment 'CADAG' 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 Internet-based research that addressed the software and hardware requirements indicated in the scenario. The more successful candidates included summaries of the technical specifications of the hardware considered and noted why the various items would be relevant to the requirements of the scenario.

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 or contextualisation.

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 the application software indicated in the scenario, in addition to standard office applications. Many candidates specified online software, but omitted to include the associated costs in their quotations.

Most candidates included quotations based on retail prices obtained from online catalogues. For this series, fewer candidates based their final selections on cost, rather than performance.

Task 3 – Enhancements

The scenario should guide candidates towards a selected area for further enhancement – in this case, testing and updating of applications. 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.

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 help in the production of fee accounts. 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 business.

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 referring to further technical support.

As in previous series, the user support charts remain an area of difficulty, with few candidates progressing beyond very simple diagnostics to propose solutions to possible technical faults.

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.

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/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.

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, or had re-named the template after creating the hyperlinks and therefore did not provide a working information pack.

APPLIED ICT

General Certificate of Education

Summer 2015

Advanced Subsidiary/Advanced

UNIT 4: eMOBILE – 21st CENTURY MOBILE COMMUNICATIONS

Principal Moderator: Richard George

General remarks

The majority of centres assessed their candidates' work to the correct standard this series. All centres completed the required documentation correctly. Again, it was interesting to see the variety of approaches to the completion of the coursework and how candidates took differing perspectives to the requirements of the brief.

A large number of candidates did not achieve good marks in the networking, connectivity and internet recommendations sections. A small number of centres gave credit for theoretical understanding and bookwork for these areas. Whilst it is important for candidates to have knowledge of the topics contained within the specification, they are expected to make specific recommendations based upon the needs of the family as outlined in the scenario. Costings and options should also be included in these sections in order to access the higher ranges of marks.

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

Requirements specification

The majority of candidates successfully completed the requirements specification section; however, 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 summarised the budgetary limitations.

As in previous years, the recommendations to future 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, but produce the specification as a single document covering the entire family.
- Use sub-headings for each of the main categories: hardware requirements; networking requirements; connectivity requirements and Internet requirements.
- Outline any assumptions you are making.
- Include details of future requirements for the family.
- Summarise the budget limitations.

Hardware recommendations

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.

This scenario indicated that the family requirements were to be matched to the available budget. 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.

A small number of 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 future candidates for this section would include:

- Remember to put this work 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 lengthy technical accounts (focus on the detail necessary).
- Discuss the benefits and drawbacks of each option and make your recommendations.
- Include costings for each item.

Networking recommendations

Many candidates presented clear and sensible 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. Please note that it is not necessary to repeat the networking recommendations for each member of the family if there is a household solution.

Overall recommendations to future candidates for this section would be as for hardware in the previous section, plus:

- Consider a network diagram/animated model.
- Explain security issues and options for the family.

Connectivity recommendations

Many candidates still 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. It is not necessary to repeat the recommendations for each member of the family if there is a household solution.

Overall recommendations to future candidates for this section would include:

- As with the previous sections, remember to put this into context and include costings.
- Avoid theory bookwork here – make sure you concentrate on making specific recommendations for your solution.
- Include wired and wireless options as applicable.
- Discuss the benefits and drawbacks of each option and make your recommendations.

Internet recommendations

Some candidates produced good evidence for this section and most centre marks reflected this accurately. As with the other sections, 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 sections, remember to put this into context and include costings.
- 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.

Culture and society

Some candidates provided very lengthy evidence for this section, giving almost too much detail about specific risks that could affect the family with the use of the recommended items. A summary of issues relevant to the members of the family and their use of the recommended devices covering both advantages and risks would be more appropriate.

Overall recommendations to future candidates for this section would include:

- Avoid theory bookwork here – make sure you concentrate on 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.

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 at 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.

Candidates who scored well in this section were able to consider the wider-reaching ramifications of the Revised Client Requirements and update many of the sections in the Problem Definition to reflect these changes. Weaker candidates tended to simply add a new section at the end of the Problem Definition document.

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.

Candidates are expected to use the project management software to plan how they expect to use the fifteen hours controlled time; this then 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 will 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

Centres need to be clear 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.

There were some excellent solutions to this scenario and some candidates produced very innovative implementations to the Revised Client Requirements. However, in many cases, it was clear that basic validation techniques had not been employed by candidates, which resulted in many systems where a concert could be overbooked. Not only did this have an impact on the quality of the implementation itself, but also raised issues with testing.

Some candidates still struggle with implementing the Revised Client Requirements in Excel and this is mainly because they do not engage in the development of the solution in the group-work stage as much as they should. Without fully addressing the Revised Client Requirements, candidates can expect to have a very low mark for this section.

Review

In some cases, the review was more of a reflective 'diary' of what happened during the fifteen-hour controlled conditions rather than a focussed review using proper evaluative writing at the standard required at A2 level.

Presentation

Centres are 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. In such cases, this can almost put the centre out of tolerance on this small section alone.

A small number of centres did not use the given template for the ePortfolio and preferred 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 focussing their efforts on work that will directly yield higher marks.

Candidates *must* be discouraged from password-protecting documents that are linked from their ePortfolios.

General Certificate of Education

Summer 2015

Advanced Subsidiary/Advanced

UNIT 6: eSTUDIO – ICT MARKETING COMMUNICATIONS

Principal Moderator: Martin Gillies

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 'Infusion' 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 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.

Some candidates omitted to identify the target audience and brand image required in their analysis of the client's requirements and this limited the success of the following work.

The majority of candidates produced test plans that provided for objective testing where this was possible, for example, length of video, navigation of website, etc, and subjective testing of graphic outcomes, usually involving peer surveys.

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 included some illustration of their development although, in several cases, the initial design work appeared to have been hastily prepared and annotated.

The most successful 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.

The use of detailed storyboards and timelines in the design of multimedia products remains an area for further development that should benefit final outcomes and, in general, the multimedia design work lacked detail, with only a minority of candidates identifying the tools and techniques they intended to use in the development of their advert and animation.

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 drawing of an 'Infusion' logo

Many candidates produced logo designs based on the given product. Most candidates included clear evidence of the development of their logo ideas.

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

A paper-based net of tea package

The net provided an opportunity to demonstrate accuracy in vector work and several candidates achieved this, although some drawings without titles, dimensions and scale were seen. The most successful nets went beyond simple rectangular boxes, and included colours, patterns and well placed images to suit the 'quality brand' theme described in the given scenario.

The images of the package in use was an opportunity to demonstrate photo editing skills, and many successful and realistic representations were seen.

An advert for a magazine, a wall poster and a menu

Many candidates produced effective paper-based products, although some would have benefited from reviewing similar, professionally produced, products before attempting to produce their own. In particular, many DTP-based menus were presented without due consideration of audience or brand image.

The magazine adverts were generally more successful, with many candidates making good use of distortion to shape their image to the page in a realistic representation. The poster produced similar results, with most candidates using suitable images to illustrate their designs *in situ*, but with limited use of lighting effects, etc to enhance the final product.

Three branded items

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 simply superimposing their logos into images of products without further editing.

Multimedia Products

Some interesting multimedia products were seen, with the standard of the supporting evidence of the development of these products being an area of improvement from previous series.

'A perfect cup of tea' animation

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 required brand image.

A video-based advert to promote the opening of the Infusion stores

A wide range of approaches to the authoring of the advert were seen. The most successful examples focused on the opening of the stores, involved both original and secondary video sequences, well timed transitions and synchronised music with voice-over. Less successful products included examples of work that omitted to address the 'store opening' purpose and simply comprised video interviews with little editing, or secondary audio.

Infusion website

Most candidates produced a website of four pages that presented the required information. Several candidates included images of their 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 adapted their work to present the required brand image, addressed 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.

In a few instances, navigation between pages did not work as intended and some candidates had not been able to place objects on the pages to achieve a coherent layout.

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.

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

APPLIED ICT

General Certificate of Education

Summer 2015

Advanced Subsidiary/Advanced

UNIT 7: eCONNECT – ICT NETWORKING PRINCIPLES, DESIGN AND MANAGEMENT

Principal Examiner: David Pearce

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 using the BTL secure web site.

Remarks for specific responses

Q.1 (a) *State one benefit of a ring network compared to a bus network.*

Many candidates gave a benefit of networking in general instead of a ring network compared to a bus network as the question asked.

(b) *State one benefit of a bus network compared to a star network.*

Many candidates gave a benefit of networking in general instead of a bus network compared to a star network as the question asked.

(c) *State three benefits of a star network compared to other network topologies.*

Many candidates gained at least one mark but few went on to score the maximum.

Q.2 (a) *Identify three services that are usually offered by an Internet service provider (ISP).*

Most candidates were able to identify one service but few were able to identify three.

(b) *Using an example, explain the role of a URL and describe the different parts of your example URL.*

Many candidates scored well here, giving a suitable example and then going on to describe the different parts.

Q.3   *Packet switching is a method of communication used on a Wide Area Networks. Apart from the order number of the packet which is used to re-assemble the transmitted packets, describe the typical contents of a packet.*

Most candidates identified source and destination address.

Q.4   (a)   *Describe each transmission method: Simplex, Half Duplex and Duplex.*

Candidates either scored three marks or could not describe any method and did not score.

(b)   *Explain the difference between serial and parallel transmission.*

It was very disappointing to see many candidates that could not describe serial or parallel transmission methods.

Q.5   *Explain the advantages to the nursery of installing a client-server network.*

Most candidates were able to explain the advantages of a client-server network but few gained full marks. Some candidates clearly had not studied this topic and were clearly guessing.

Q.6   (a)   *What is meant by the term Virtual Private Network (VPN)?*

Few candidates were able to describe a Virtual Private Network.

(b)   *Explain the process carried out to ensure all communication is kept secure.*

Many candidates described encryption and gained a mark but few candidates were able to describe the other processes.

Q.7   *Discuss the benefits and drawbacks of installing networked computers compared to stand alone computers.*

It was quite disappointing to see many candidates unable to discuss the benefits and drawbacks of installing networked computers compared to stand-alone computers. Where candidates were aware of the benefits and drawbacks, they scored well.

Part B – The Recommendation

General remarks

Part B – 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.

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.

Candidates can gain full marks for responses with different solutions if they correctly justify their choices.

Task 2

Many candidates were able to describe Unshielded Twisted Pair (UTP), Shielded Twisted pair (STP) and fibre optic cable and give advantages and disadvantages of each type of media.

Task 3

Most candidates were able to give reasons for installing wireless communication infrastructure.

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.

Candidates labelled their screen shots as instructed. However, centres 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.

When completing Task 11, candidates should refer and use the given objectives to determine who should be in which group and what permissions each group should be given.

The permissions should be justified with reference to the objectives.

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.

Some candidates correctly set the permissions for each of the groups in Task 15 but were unable to justify their reasons for setting the permissions in task 11. These candidates failed to gain high marks.

General Certificate of Education

Summer 2015

Advanced Subsidiary/Advanced

UNIT 8: eLEARN – PRODUCING EDUCATIONAL SOFTWARE SOLUTIONS

Principal Moderator: Martin Gillies

General remarks

As with the other units of the practitioner qualification, the entry for AICT 8 in this series was relatively low. The following comments from previous series remain relevant.

In most cases, candidates had addressed the requirements of the specification 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. In some cases, this included consideration of the national curriculum programmes of study for their intended purpose and audience.

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.

A few candidates failed to carry out sufficient investigations and therefore had difficulty in formulating a detailed problem definition with 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 by a competent third party. 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 was 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 audience and purpose of 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 and ensure that the tutorials are each directed towards their intended audiences.

Test an eLearning package

Some good test plans were submitted. 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 test results. 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 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

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 home network.

APPLIED ICT

General Certificate of Education

Summer 2015

Advanced Subsidiary/Advanced

UNIT 9: eTRANSACT – SELLING AND ICT

Principal Moderator: Martin Gillies

General remarks

As with other units of the practitioner qualification, the entry for AICT 9 this series was relatively low.

Some centre-based issues were reported where difficulties arose in moving the candidates' systems onto media suitable for moderation. Centres embarking on this unit must appreciate the implications of moving these systems and devise realistic solutions for presenting this work for external moderation.

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 transactions. Some candidates had designed data entry facilities and validation routines.

A minority of candidates appeared to have created retrospective 'designs' for their implementations. Retrospective design work should not be given any credit, as 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. The 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. Some 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. This information should form a part of the transactional website and not be presented as an essay attachment to the ePortfolio.

Review

Some candidates' reviews tended to contain a narrative account of the work carried out rather than an evaluation of their finished systems and own performance. Candidates would benefit from ensuring that their reviews covered the areas included in section 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 candidates' work. In some cases, candidates would have benefited from testing the navigational links to ensure that work and other web pages could be accessed when the completed work was removed from the school/college network.

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