



GCE EXAMINERS' REPORTS

**APPLIED ICT
AS/Advanced**

SUMMER 2014

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Unit	Page
1	1
2	6
3	8
4	11
5	14
6	16
7	20
8	24
9	26

APPLIED ICT
General Certificate of Education
Summer 2014
Advanced Subsidiary/Advanced
Unit 1: eBUSINESS – GAINING SKILLS IN eBUSINESS

Principal Examiner: Jen 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.

Centres were provided with the paper for Part A in an on-screen format that required 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)

Q.1 (a) *Identify **one** main characteristic of a charity.*

Many candidates responded to this question by providing descriptions of what charities do rather than their characteristics. However, a minority of the candidates were able to define a charity as a non-profit making organisation.

(b) *Identify **one** group of stakeholders in the society and describe their interest in its success.*

Most candidates were able to identify a stakeholder or group of stakeholders but some struggled to describe their interest in the success of the organisation.

Q.2 *Name **two** secondary sources that could be used to gather information on competitors in the steam train market. Describe the information that could be gathered from each source.*

Some candidates scored well in this question and were able to identify relevant sources, such as competitors' websites, and to describe the type of information they could gather, such as prices, timetables and events. However, a minority of the candidates are still not able to differentiate between primary and secondary sources and therefore lost all marks available for this question.

Q.3 *Word processing packages allow the user to set font styles, size and format. Describe how **two** other features of a word processing package could be used to improve the presentation of the report.*

This question was answered poorly, with few candidates able to identify relevant features. Many made suggestions already ruled out in the stem of the question. Similarly many suggested the use of WordArt or ClipArt to liven up the document.

Where candidates were able to identify that the report would be a formal business document, they made sensible suggestions, such as foot notes, contents tables, the insertion of graphs and the tabulation of data.

Q.4 *Describe **two** ways in which the society could use the Internet to promote its fine dining packages apart from using its own website.*

Many candidates provided good responses to this question, including the idea of 'pay-per-click', with search engines and the use of email to send advertising emails via a group email to donors.

Q.5 *The start date and end date of the launch project for the fine dining packages are essential pieces of information. Identify **four** other items of information that will be needed to create the project plan.*

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 project management software and weak answers were seen by all examiners.

Q.6 *Describe how a computerised stock control system could be used to ensure that all ingredients are in stock.*

Many candidates failed to achieve good marks in this question as their responses did not take account of the context of the question. Answers tended to describe how they would use access to set up relevant queries rather than concentrating on the functions carried out by a stock control system.

Q.7 *Name the legislation that governs the storage and use of personal data.*

This part of the question was well answered.

State **three** principles of the named piece of legislation.

Too many candidates re-worded the principles and ended up with three statements addressing the need to keep data secure. Where candidates were familiar with the legislation, many were able to gain full marks for this question.

Q.8 *Explain how to structure and use a database to create tickets that include customer and package details from the database application.*

Most candidates were able to gain some marks for this question. Many candidates were able to draw on their knowledge of relational databases to suggest the use of two tables connected by a relationship to gain all three marks.

Data is valuable to an organisation. Describe a method that the society could use to back up its data.

Many candidates described methods that are not suitable for the volume of data that a commercial organisation is likely to hold. These methods included inappropriate technologies such as the use of a USB flash device, CDs and DVDs.

Appropriate technologies include cloud storage or backing up onto external drives that are then stored off-site.

Q.9 *Describe how the use of technologies such as mobile communications and the Internet can enhance opportunities for the society. Present a balanced view in terms of the advantages and possible disadvantages.*

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 railway society or suggest ways in which these technologies could be used in the operation of the dining services.

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 and some even discussed their lack of familiarity with the software applications to be used in their memorandum.

Task 1 – Administration

- (a) *The administration department has details of a sales meeting that the Sales Manager, Jill Davies, has arranged.*

Many candidates appeared not to know how to set out an agenda. Few were able to put the four given items into the logical order with many placing 'any other business' as the first item. Where candidates were familiar with the business documents named in the specification, they were able to gain the six marks available.

- (a) *The Sales and Marketing Department have carried out a survey to assist with the pricing structure for the new fine dining package. This data needs to be analysed.*

Many candidates found this task accessible. Candidates who were familiar with the use of absolute cell references and/or named ranges were able to gain high marks. In some instances, candidates struggled to choose an appropriate graph or to use only the required data.

Task 2 – Sales and Marketing

- (a) *The sales and marketing department has details of **events** and **bookings** that have been made. These details need to be organised.*

Many candidates were able to recognise the need to split the data into an **events** table and a **bookings** 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 into a customers and bookings structure. This resulted in an incorrect relationship on the booking number rather than the event number.

Most candidates attempted to create relationships between their tables. Some 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 adjustment of field lengths or the appropriate application of validation rules.

- (b) *To assist in the input and view of event and bookings, the sales department requires an input form.*

Where candidates had structured the data correctly, they were able to create an event form with a bookings subform. Most candidates were able to insert the logo and title the form.

- (c) *The sales manager has asked you to produce a “Sales Report” for events taking place in June and July. The report should show the number of seats purchased for each event, the total value of the bookings and the number of seats still available for each event.*

Extremely few candidates were able to gain full marks for the report.

- Many candidates were not able to create the calculated field in the query to generate the data for the report.
- Where candidates had created the correct relationship between the tables they experienced fewer problems generating the document.
- Many candidates were not able to differentiate between information to be shown on the first page of the report and information to be included on each page.
- A minority of candidates attempted the required calculations although, when these were undertaken, candidates scored well.
- Very few were able to insert the correct page break.

- (d) *The Sales Manager would like you to comment on ways in which the database could be improved to allow South Country Railway Society to have an effective booking system.*

Some candidates were able to access all marks available for this task. They produced well-structured memoranda and good specific suggestions for the improvement of the database.

Many candidates appeared not to be familiar with the structure of this standard business document.

Candidates failed to gain marks when their suggested improvements were in fact instructions from the question paper that they had been unable to carry out.

APPLIED ICT
General Certificate of Education
Summer 2014
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. Candidates would benefit from researching standard documentation in order to design effective outputs.

Implementation

The quality of the database solution continues to improve, with the majority of candidates producing a series of related tables and effective data entry forms; greater automation within the systems was also evidenced. The output of some of the reports would have benefited from additional formatting to replicate standard business documents.

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

APPLIED ICT
General Certificate of Education
Summer 2014
Advanced Subsidiary/Advanced
Unit 3: eWARE – HARDWARE AND SOFTWARE

Principal Moderator: Martin Gillies

General remarks

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

Task 1 – Preliminary research

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

Many candidates included a bibliography of sources used.

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 well reasoned 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. The specification of application development software with devices for testing, but without hardware for development, was a common error.

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

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

Task 3 – Enhancements

The scenario should guide candidates towards a selected area for further enhancement, in this case the capture and editing of high quality images. 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 present given information relating to hits received by the scenario website and to prepare standard stationery for the business. 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 although the scope of the routines in terms of text formatting and alignment and the standard of annotations were variable. Some candidates provided screen-prints of the recording process in progress, but lost marks by omitting the required listings.

Tasks 6 and 7 – Standard ways of working

Candidates were asked to produce documentation (guidelines and a presentation) on standard ways of working to suit two distinct purposes.

Most candidates were able to produce guidelines for safe working with ICT and presentations on safety, integrity and confidentiality of data that provided some useful information. Several well formatted documents with well summarised information were seen, although less successful candidates included guidelines with limited text formatting and paid little attention to the presentation of their slides.

Task 8 – User support

Candidates were required to create three flow charts, each designed to help troubleshoot 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.

However, 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

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.

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

Task 10 – Client information pack

Candidates are required to link their work to a given template, or client information pack. The use of the template is intended to help candidates ensure that all work is completed and that the finished versions of the work for each task are presented to the examiner.

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 2014
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, it is expected that candidates 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 to candidates should assist the completion of the 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; 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 should there be 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 book work 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 should there be 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 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.

APPLIED ICT
General Certificate of Education
Summer 2014
Advanced Subsidiary/Advanced
Unit 5: ePROJECT – PROJECT PLANNING FOR ICT

Principal Examiner: Peter Lewis

Problem Definition

Most candidates were able to reassess the Problem Definition in light of the Revised Client Requirements and update the document accordingly. It is useful when candidates show these updates in a different colour as this aids both the centre marking and the moderation process. Centres are reminded that it is only the changes in colour that should be considered for the marking of this section as it is only this work that has been completed inside the controlled conditions.

Candidates should be encouraged to consider the wider implications of the Revised Client Requirements on the whole project and update the Problem Definition accordingly.

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 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. Of course, this plan will change quickly after the introduction of the Revised Client Requirements and the plan will need to be updated accordingly. Similarly, as sub-tasks take less time or more time than expected as the candidate progress through the controlled time, the plan will need to be updated. There have been many examples of centres using this approach and candidates have scored well into mark band 3. However, some candidates simply use the project management software to record *how* they have spent their time as they progress through the controlled time. In such cases, the baseline plan is effectively blank and it develops as the candidates complete the work through the controlled time. This is not proper project management and does not allow the facilities of the project management software to be fully utilised and this approach has been penalised heavily during moderation.

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.

During this series, it was apparent that a number of candidates did not fully understand the scope of the Revised Client Requirements and, consequently, did not fully meet the

requirements of the changes. Candidates must ensure that they understand the changes that are required and that they build these changes into the *whole* of the solution. There were some excellent examples of where this had been done. However, some candidates still struggle with this part of AICT5 and this almost always appears to be the case with candidates who did not fully engage with the development of the prototype model during the group work stage. In such cases, these candidates do not really understand how the prototype model works and, as one would expect, have difficulty amending it to reflect the Revised Client Requirements. Without fully addressing the Revised Client Requirements, candidates can expect to have a very low mark for this section.

Review

The importance of quality evaluation and review cannot be overstated. Some candidates produced very long reviews which were mainly based around comments on screen dumps, resulting in very superficial reviews. In some cases, the review was more of a reflective 'diary' of what happened during the fifteen-hour controlled conditions.

Candidates must ensure that they devote sufficient time to this section and that they engage in proper evaluative writing of the length and detail expected 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.

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

APPLIED ICT
General Certificate of Education
Summer 2014
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 'WJ Sound' 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.

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. The recording of stimulus materials and the explanation of design decisions were areas of noted improvement but, as in previous series, there were examples where significant changes in the designs occurred without any accompanying explanation.

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, as is the early identification of the requirements for any accompanying sound track. 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 television 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 a station logo

Many candidates produced logo designs based on the given product name, although a variety of alternative names were used, with some very imaginative strap lines. Most candidates included clear evidence of the development of their logo ideas. The most successful candidates produced professional designs that were clearly related to the new station and given audience and that included graphic features and colour combinations that set a theme for the campaign products.

A paper-based net of CD case

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 were closely based on simple rectangular cases, with colours, patterns and images applied to the inserts to suit the retro 60s, 70s and 80s theme.

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

An advert for a music magazine, a flyer and a billboard

Many candidates re-purposed their 'CD' image and added text and their logo, producing an effective advert for a magazine. Some candidates would have benefited from reviewing similar adverts in professionally produced magazines before attempting to produce their own. Many candidates decided to illustrate their adverts *in situ* on a magazine page, making good use of distortion to shape their image to the page.

The flyer and billboard 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 products.

Three items of clothing or accessories for the launch party

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 designs without further editing to blend the images.

Multimedia Products

Some very good multimedia products were seen, but the standard of the supporting evidence of the development of these products remains an area for improvement.

A timeline animation featuring the station's logo

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

The most successful animations combined tweens with background transitions that highlighted the retro theme of the radio station.

A 30-second television advert to promote the launch party

A wide range of approaches to the authoring of the advert were seen. The most successful examples focused on the launch party and involved both original and secondary video sequences, well timed transitions and synchronised music with voiceover. Less successful products included examples of work that omitted to address the 'launch party' purpose and simply comprised video with little editing, context or sound.

20-second radio commercial to attract potential advertisers

The most successful examples of the radio commercial included reference to potential for advertising and involved an original voice track and secondary background music, which had been well synchronised. Less successful products included examples of work that omitted to address the 'advertising' purpose and simply comprised a voice track introducing the radio station.

WJ Sound website to comprise:

- **home page featuring the station's logo, the animation and images of the three advertisements in use**
- **events page including the television advert and images of party goers wearing the promotional clothing or accessories**
- **sponsors' page featuring the sample radio commercial and a 'Contact Us' form**
- **music page including the representation(s) of the CD case with inserts**

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 effective animations that had been well integrated within the page designs were seen. A small minority of candidates relied on the use of animated gifs downloaded from secondary sources.

The most successful candidates adapted their work to suit the specified audience, 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.

Review

Produce a review document that evaluates and suggests improvements covering:

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

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

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

ePortfolio

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

Most candidates produced a functional ePortfolio that provided access to the products and supporting evidence. In general, the ePortfolios provided limited context but were usually easy to navigate, although the some candidates' index pages had not been clearly named. 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 2014
Advanced Subsidiary/Advanced

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

Principal Moderator: David Pearce

The AICT 7 paper is divided into two parts: Part A, comprising a one-hour on-screen 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-screen using software provided by WJEC. This did not cause any difficulties for centres.

Remarks for specific responses

- Q.1 (a) *One benefit of a network is being able to share hardware. Give three other benefits of networking computers.*

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

- (b) *Describe two disadvantages of using networks compared to standalone computers.*

This question is about **using** networks compared to standalone computers and not **setting up** networks compared to standalone computers. Marks were not awarded for disadvantages of setting up a network such as initial costs.

- Q.2 (a) *Describe the difference between serial and parallel transmission giving an advantage of parallel transmission.*

Some very good answers were seen while some candidates were clearly guessing the answer to this question.

- (b) *Define each transmission method named below.*

Again, some candidates did not know these basic transmission methods and gained no marks.

Q.3 (a) *Identify the hardware required to allow communication over a WLAN.*

Most candidates could identify a switch and a NIC that would be required but many failed to mention that these should be WiFi.

(b) *Give **two** benefits and **one** possible problem for a business using a WLAN.*

Many candidates were able to give **two** benefits and **one** possible problem for a business using a WLAN.

Q.4 (a) *Local Area Networks are often connected using Shielded Twisted Pair (STP) or Unshielded Twisted Pair (UTP) cables. Describe in detail the physical difference between STP and UTP cables, giving one advantage and one disadvantage of using STP compared with UTP.*

Some candidates provided excellent answers for this question while others were clearly guessing.

(b) *Wide Area Networks are often connected using fibre optic cables. State three advantages of using fibre optic cables compared with UTP or STP.*

Most candidates gained marks here.

Q.5 *State two facilities provided by network operating and accounting software.*

Most candidates were able to give one or two facilities provided by network operating software but fewer were able to give a facility provided by and accounting software.

Q.6 *Data transmitted on a Wide Area Network is broken into packets before transmission. The contents of a packet will typically include the destination address and the actual data to be transmitted.*

(a) *Identify two other data items in a typical packet and describe the role of that data.*

Many candidates were able to both describe the data and give the role.

(b) *Explain the role of a router in a network using packet switching.*

Few candidates identified that the role of a router is to know about its nearest neighbour nodes and send the packet along the best route.

Q.7 *Describe in detail the main features of a peer-to-peer and a client-server network. Give reasons why you would recommend Garth View Farm Shop install a client-server network as opposed to a peer-to-peer network.*

Some candidates gave excellent in-depth answers and gained high marks.

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.

Task 2

Many candidates just stated that email is faster. This is not worth a mark and candidates should be encouraged to then go on and explain why email being quicker would benefit the business in the scenario. For example, in this case they could have promotion on seasonal products and the speed of delivery of an email would be an advantage.

Task 3

Most candidates were able to give at least one statement and sanction.

Task 4

Many candidates were able to explain anti-virus software and the role of a proxy server.

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 and Task 12, candidates should refer to 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 for the database using the correct terminology such as 'Full Control' or 'Read' and not in general terms such as 'update' or 'view'.

Some candidates correctly set the permissions for each of the groups in Task 16 and Task 17 but were unable to justify their reasons for setting the permissions in Task 11 and Task 12. These candidates failed to gain high marks.

APPLIED ICT

General Certificate of Education

Summer 2014

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 measurable 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 is 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 each of the tutorials are 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 2014
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. 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 candidates had created comprehensive test plans that would allow them to test all areas of their system. The results were often presented with appropriate commentaries.

Provide customer advice

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