Examiners' Report Summer 2008

GCE Applied ICT (8751-9752)

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Unit 1: The Information Age (6951)

General comments

The majority of centres are now familiar with the requirements of this unit, As a result most of work seen was appropriate and gave the candidates good opportunities to meet the requirements of the specification.

A number of centres still lack an understanding of the difference between the eportfolio and the e-book. The e-book should be a self-contained item which is accessible in a browser. The pages should be designed for on screen viewing and the user should be able to navigate using hyperlinks both between pages and within a single page.

The best work was were candidates used appropriate web authoring software competently to produce their evidence, adhering to standard ways of working, as set out in the 'What you need to Learn' sections. These eportfolios were generally easy to navigate, with sections that were clearly labelled. In most cases, all the links worked, so that the evidence was easily found. Many displayed good use of non sequential and sequential links. The ebooks were able to be read as a book, ie page by page with the use of sequential links.   The use of menus provided the non sequential links for the different sections.

There was also an improvement in the use of a good range of original and ready made multimedia components and, in many cases, these were used very effectively. Candidates could help evidence this aspect by including the origin of the multimedia components used in their bibliography.

In some case it was apparent that the candidates had produced a series of essays covering the topics required for strand a) b) c) and then simply linked them into an eportfolio. Work of this nature can gain marks in those strands, however in d) e) very few marks can be awarded, because no e-book is present.

Some assessors made appropriate comments, however in many cases, the comments on the erecord sheets were too brief to be helpful, or gave no indication of how the assessor had applied the assessment guidance. Comments are essential to help the moderator agree the marks given.

Stand (a) On-line services:

In most cases this was well described and supported by good examples, illustrated usually with screenshots. In some instances the screenshots were too small to be read easily. A small number of candidates described fewer examples than the required number of services. Some are still including two types of the same online service which are presented as different services. This limits the marks they could be awarded.

At the top of the mark range good candidates covered the required depth by describing and evaluating more than one aspect of each service. This is essential for Mark band 3 level work.
In some cases the information presented was merely copied from sources, with no evidence that candidates understood what they were writing about.
Some candidates are still some just evaluating a website candidates must evaluate the service its self, the websites serve as examples to illustrate the service.

Stand (b) Life in the information age:

This strand was often less well evidenced with candidates still struggling on occasion to recognise the difference in focus between this and strand a. Banking and Shopping in particular are often simply described, rather than the impact on life being described.

It is essential that variety of sources of information is used to gain marks above MB1; sources of information other than the internet must be used and listed in the bibliography.

Better candidates describe and evaluate the way that life has been affected by the information age, and use good examples of changes in life as a result of the use of these services. Candidates should be encouraged to focus on the effect that technology has on people's lives, rather than the technology itself.
This is essential to access the higher mark ranges.

Stand (c) Digital Divide:
More evaluative comments in the candidates' own words would raise achievement in this strand. Reference needs to be made to local, national and international when discussing the digital divide, in order to access full marks within each mark band.

Candidates often explained the factors creating the divide but had little or no comment on the impact or ways of bridging the divide.

To gain marks in the higher ranges the candidates must cover the divide at all levels, Local, national and international.

Stand (d) The e-book:

The better candidates produced ebooks using a hypertext structure consisting of a series of information pages. This allowed users to navigate from page to page using the navigation links provide. A slide show is not appropriate, nor is a pdf document.

Weaker candidates need to pay more attention to sequential and non sequential links.

Links and navigation were still an issue due to candidates using absolute link addressing which was subsequently broken when the CD was written.

Better candidates tried to address the audience in 100 years' time.

Standard ways of working were not always observed in that filenames were not meaningful and external assessors had difficulty in finding the start of the e-book.

Stand (e) Components and structure:

Candidates need to include both ready made and original content. Better candidates included sound and video clips in there work, these were often in the form of a short interview or some background music to a page. It is essential that the candidates make it clear which are ready made and which are original since it is not always apparent to the moderator.

Candidates often refer to the testing in the evaluation section and state that the e-book is fully working, however the version supplied to the moderator does not support this. Components were often missing due to the copying to CD. Centres must encourage candidates to copy the e-book to CD and test the links before it is sent for assessment.

Stand (f) EVALUATION:

Better candidates are evaluated their own performance as well as that of the e-book. To gain full marks candidates must include feedback from others in the evaluation. Weaker candidates still tend to list what they did and how the e-book was produced.

Many candidates still confused the eportfolio with the e-book at this stage. The evaluation is not part of the e-book and should be a separate document within the eportfolio

Standard Ways of Working

In most cases the only evidence the external assessors had for this aspect was the bibliography and the file structures and names used by the candidates. In some cases it was difficult to locate the e-book or e-portfolios of candidates as these were often not well named.

Bibliographies are the main source of evidence to support the range of sources of information used by the candidate; too many candidates still give "Goole" "Yahoo" and other search engines as the source of the information when clearly the source was a website found using them. Many candidates only quoted web sites, the specification requires a wide range of different sources to used for strands (b) and (c).

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Unit 2: The Digital Economy (6952)

This is the fifth moderation window for this unit and this report should be read in conjunction with previous reports. Previous reports can be found on the Applied GCE ICT section of the Edexcel website:
http://www.edexcel.org.uk/quals/gce/ict/as/8751/

General Comments

There was a large number of entries for this unit and it was pleasing to see that marks reflected the whole range from 1-60.   There were an increasing number of candidates achieving in the higher mark bands and addressing all the strands well. There were also more centres assessing the strands accurately to national standards.

Most centres submitted the sample required on one disk and included the esheets and candidate authentication sheets all labelled according the correct naming conventions as detailed in the document "Moderation of ePortfolios: Guidance for Centres" which can be found on the above web link.   Many candidates' eportfolios were in the correct file formats, were within the stated file size of 20 MB and most contained a clear index file which started the eportfolio.   It was good to see many assessors giving clear feedback in the esheets explaining the assessment decisions made and marks awarded. See the section on admin at the end of this report which details some poor practice relating to the submission of work for moderation.

Although most candidates addressed the strands correctly, there are still instances of candidates being placed in too high a mark band for the evidence produced. The Assessment Guidance on pages 42-44 of the unit specification give clarification on how to award the marks for the 3 marks bands across the 5 strands.

Comments on Strand a

Most candidates selected suitable transactional websites to evaluate and most cohorts had chosen different websites, which is good practice, demonstrating an independent approach which is a requirement of the higher marks bands.   There were still instances of EBay, and other auction sites being selected, which does not enable candidates to fully address this strand.   It was good to see most candidates had selected sites which enabled customers to buy items from stock which are then delivered to a selected address.   Sites need to have a virtual shopping basket and enable transactions to be made.   Candidates choosing some of the smaller, less well known transactional websites often evaluated a wider range of features.

Most candidates illustrated their evidence with a good selection of screen prints.

Some candidates are concentrating on the products rather than evaluating the design aspects of the website.   Some candidates had been placed in the higher mark bands although there was only evidence of a limited range of features included and often only brief descriptions and few evaluative comments.   Many candidates are not **explicitly** evidencing methods used by the transactional website to capture customer data. Some candidates omitted to include the "shopping basket" which is an essential feature of such a site.

There was some evidence of templates being completed which is not appropriate for this qualification.   Candidates wishing to demonstrate an independent approach should look at 2.3 and 2.5 for ideas as to what features to describe and evaluate.

It was good to see more candidates understanding "customer experience" and there was an increase in candidates achieving full marks in this strand.

Comments on Strand b

Many more candidates produced evidence that addressed this strand.   At least 2 diagrams are required to address all the marks in mark band 1, one for the events leading up to the purchase and another clearly showing the main back office processes as described in 2.4 of the unit specification.   Stock control was often omitted by candidates and this is an essential aspect of the back office processes. Candidates accessing the marks in mark band 3 should produce a set of accurate, well presented diagrams which address the information that flows into and out of the organisation and between different departments.   Few candidates clearly illustrated how payment works for transactional sites and many had just included manual systems between a customer and an Accounts Department.

It was disappointing to see a significant number of candidates still reproducing diagrams from textbooks and the ICT microsite.   This is not acceptable practice. Such diagrams should only be used for the learning process. Candidates are required to produce their own diagrams and it is good practice to annotate and explain the diagrams which demonstrates understanding.

Comments on Strand c

As reported in the Summer 2007 report, many candidates are still writing about security in general and, sometimes, relying too heavily on reproducing textbook content rather than relating their research to the requirements of the strand.   Many candidates are still relating the evidence to their own home computer rather than addressing the requirements of the strand.   The emphasis is on the data collected by organisations and the threats to this data during this process and the measures organisations take to protect the data collected.   Many candidates related the evidence to the transactional website evaluated for strand a which is good practice.

Candidates are not required to reproduce the legislative acts but to explain how these can help organisations protect the data collected.

A good number of candidates did not clearly describe both threats and preventative measures and many ignored legislation.

Candidates are still neglecting to include the evaluative comments that enable them to address all the marks in mark band 2 and also progress to mark band 3.

Comments on Strand d

The previous reports for this unit should be read in conjunction with these comments.

It is good to see many candidates addressing this strand well and more achieving marks in mark band 3.   However, it is disappointing to see that many centres still appear to be using a very structured approach with the result that all candidates are producing very similar screens and, indeed, sometimes identical across a cohort. This has been pointed out in previous reports and such work restricts candidates to mark band 1.   Candidates progressing to the higher mark bands should clearly produce evidence demonstrating an independent approach to the creation of the database structure and subsequent manipulation.

Most candidates are evidencing the requirements for mark band 1 well although some neglected to show the one-to-many link which is part of this mark band.   Only two tables with a one-to-many link is required although more can be evidenced. Candidates are not required to evidence normalisation which is part of the A2 unit 6957.

Candidates should present evidence showing progression through the main steps, ie:

1. examine a large dataset and create a suitable structure for 2 tables

2. test the database structure prior to importation using test data

3. import the dataset into the created structure, showing the number of records imported into each table

4. test the import is successful

5. manipulate the dataset to extract meaningful data and also to identify trends. Likely trends could be patterns of sales over a period of time and/or across different areas. It should be noted that output should be presented in a meaningful way such as reports, charts/graphs.   Output presented in datasheet view does not do this.

6. make recommendations on the trends identified

There were a significant number of candidates who were awarded marks at the top end of mark 2 and mark band 3 where there was no evidence showing how the final output was reached.   Candidates need to clearly evidence the manipulation of the database created.

Explanations with relevant screen shots provide the evidence required.   Candidates did not seem to understand Pie charts and these were often used inappropriately. Many screen shots were too small to read.

Many candidates produced screen shots for every step of the importation process which is not required and then neglected to include evidence to support the rest of the strand adequately.   Relevant screen shots demonstrating the main practical activities addressing the strand has been undertaken is required.

The database itself should not be included as this is not one of the acceptable file formats for this qualification.

Comments on Strand e

The comments made in the January 2008 report are totally relevant to this window, ie:

"Many candidates are still explaining how they used Access rather than evaluating the performance of the database they have created.

Many are evaluating their "ebooks" when the unit requires an eportfolio and this aspect is not part of strand e for this unit. Candidates are required to evaluate their own performance for the whole unit as stated on page 38 of the unit specification which explains the evidence required for the Assessment Evidence.

Some candidates include feedback from others but neglect to refer to this feedback in their evaluations which is a requirement for mark band 2. It should be pointed out that feedback is required from more than one "other"."

Comments on Administrative Procedures

Some disks were received late and long after the deadline of 15 May. Not all centres sent authentication. Some disks received were not labelled correctly, and the correct naming conventions were not followed. There were also a significant number of candidates not producing evidence in the correct file formats, ie html or pdf files. Word files are not an accepted file format. There were also a good number of eportfolios with broken links making the evidence difficult to find.

It should be pointed out that all eportfolios should be sent on ONE disk which contains evidence for 6952 only. This was not the case for all centres.

There were a significant number of esheets which were not totalled correctly and/or had marks which did not reflect the marks submitted online.

Some CDs were sent with no protective packaging and some arrived scratched as a result.

Many eportfolios contained files that did not relate to the evidence required for the 5 strands for this unit resulting in file sizes above the 20 MB allowed.

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Unit 3: The Knowledge Worker(6953)

General Comments

The preparation of candidates for this examination continues to improve as centres get more comfortable with the format and take on board advice given in previous examiner's reports and INSETs. There are suggested timings on the exam paper which candidates are advised to stick to as this will enable them to attempt every question. Activities 1, 2 and 5 can be answered using bullet pointed lists. This will save the candidates considerable time. Question 4 should be a report and not a letter. Candidates should use sub headings, proof read their report and use the spell checker.

Activity 1

Activity 1 was generally well answered by most candidates. The marks for summarizing the situation were generally all fulfilled with many candidates gaining the maximum 7. The same applies to the marks for the decisions required but a number of candidates missed the mark for setting the profit margin as they omitted the word "margin". Few candidates scored well on other factors to take into account. It should be stressed to candidates that the situation is set out in the scenario and that the figures being accurate is a given.

Activity 2

Again this question was the one candidates found most difficult to answer with few candidates achieving more than half marks. Candidates seemed to be thrown by the fact that there was only one source this time. The first part of the question was answered slightly better than the second with several students completely misunderstanding the question and reviewing the spreadsheet as a source. Many candidates gave answers which would have been given credit in Activity 1. Many had practiced previous papers and gave standard answers like, out of date, not reliable and not first hand.

Activity 3

It became apparent in the window of the exam that there was a misprint in the activity. In the section where candidates were asked to perform tasks under 'house types' candidates were incorrectly asked to print in formula view, a section of the 'house costs' page. In order to be fair to all candidates the examination team decided to withdraw the marks from this section of the question and reallocate to another part of the activity allowing candidates to access all marks regardless of how they approached the activity of house types .

Gridlines and column and row headers still proved to be the greatest cause of marks lost! Many students printed the actual Sales data for the second section and didn't show the formula. The use of the model section scored relatively well although it was clear from earlier calculations that several students had come to their results with false calculations but still scored well as incorrect answers weren't penalised twice.

Activity 4

The layout of the report was better than previous years although. Generally font, title and spelling were ok although the language was often too casual for a formal report. Again there were a lot of reports still in the form of letters which centres should discourage.

Many candidates used screenshots to show their chosen features and lengths, though sometimes this was written within the text of a paragraph, or presented as a graph – this usually matched the choices seen in the previous activity.

It was clear that many centres had correctly instructed their candidates to include a graph and many more were relevant and fit for purpose this series. There were, however, many that were badly labelled and often did not have any explanatory text. This made it impossible to award fitness for purpose marks.

Very few candidates included concluding statements that provided suitable summaries.

There was evidence that the overall standard of reports is still improving, with most candidates attempting this activity and managing to include evidence of a solution and a graph to gain some marks.

Activity 5

This activity was again poorly tackled by most candidates, with very little actual reference to the model.

Many candidates again evaluated their own ability to tackle spreadsheets, rather than the performance and effectiveness of the model. Few suggested clearly that they had actually provided a solution to the problem.

Most candidates attempted to make suggestions for improving the model, although some found it difficult to express their ideas in a way that was understandable.

Administration

Examination responses are still not always supplied in the way required. A large number of candidates failed to supply the activity number and the other required items in the header or footer of their printouts. There were also a large number of cases where the printouts were supplied in the wrong order. Centres should be aware that examination documents are considered to be the e-portfolio described in the Standard Ways of Working section of the specification (practical restrictions mean it is not possible at present to accept the examination work in an e-portfolio). Not having output correctly labelled or in the wrong order is considered to be not "creating an appropriate structure". Marks are awarded for Standard Ways of Working and students may lose these if their materials are not labelled or badly ordered.

All printouts should be attached to the cover sheet via a **single** treasury tag to the hole available in the top left corner of the inside of the cover sheet as shown in the instructions. There should be no need to punch extra holes in the cover sheet and the treasury tag should be passed through the cover sheet and the printouts only **once**. The instructions are clear and the examiners would be grateful if centres could remind candidates to do this.

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Unit 4: System Design and Installation (6954)

General comments

There was again a wide range of marks seen for this unit ranging from single figures to a relatively small, but increasing number in the mid 50s. There was however, still a highly noticeable difference in the presentation styles of the eportfolios submitted across the candidate cohort. It was again disappointing that a small but significant number of eportfolios were seen which did not demonstrate standards which reflected AS candidates.

There was increasing evidence that the requirements of the higher mark bands were beginning to be appreciated by a growing number of centres and candidate work seen supported this. It was again disappointing to see that, some centre assessors are still giving either no, or almost meaningless, feedback. Comments like 'well done' or 'nice screenshots' do not aid either the candidate or the moderator. Assessors are advised to use the e-sheet to explain how they reached a grading decision and to indicate if the candidate worked independently which is a requirement of the higher mark bands.

Strand (a) - Needs Analysis

The production of a proper needs analysis for a client with complex needs is central to this strand and centres are again reminded to refer their candidates to section 4.1 of the unit specification. Almost all Candidates had little problem in finding two existing systems but a small but significant number could not describe how they matched their client's requirements in terms of similar functionality. Candidates' attaining the higher mark band in this strand were able to give their client an informed conclusion, by evaluating the pros and cons of the chosen system, indicating alternatives and drawbacks which the chosen system might have.

Strand (b) - System Specification

The main over-arching requirement of this strand is that a stand alone system needs to be recommended to the client through a detailed and informative systems specification (section 4.7 of the unit specification). It is also advised that centres point out, to their candidates', the information in sections 4.2 to 4.6 of the unit specification as to the what areas should be considered when putting together their system specification. Many candidates were producing specifications which bore no resemblance to the two chosen systems from strand a, nor matched the needs of the client.

It was pleasing to see that many candidates' were producing a hardware and software specification for the client in non-technical language which would then enable the client to have a full understanding what or why they were purchasing the stated items. Ergonomic considerations needed to be given and related to the recommended system.

Strand (c) - System Build

As mentioned in previous Chief Moderators reports the system build does not need to relate to the system recommended in strand (b) but there should be some indication as to the requirements of the system being built. A small minority of centres still created scenarios which asked candidates to dismantle then re-build the same system this is not the purpose of the unit. The starting point for this strand should be an empty case together with the components to be installed.

It was noticeable in this moderation period that a growing number of centres are allowing candidates' to submit work showing upgrading of a system rather than a system build. This is more suitable for unit 6 than this unit.

There were again a whole range of different methods employed to demonstrate examples of practical work being undertaken including short video clips or photos' clearly showing the candidate at work, which had been annotated by them and authenticated by the assessor. In a number of cases it was again not clear that the candidates had actually undertaken the practical work for which they were claiming as their own, setting date and time on digital photographs is one simple way to prove authenticity of evidence.

Strand (d) – Testing

Testing should show that the complete system meets the agreed specification standards together with how identified problems were resolved should be produced. It is recommended that candidates should show evidence of testing in the form of screenshots or printed output. A detailed test specification indicating formative and summative testing should be produced and that all hardware and software functions are tested to ensure the complete system is 'fit for the purpose intended'. The comment 'test performed as expected' is worthless without the evidence to prove it.

Candidates should produce annotated evidence of the **variety** of tests undertaken, covering all aspects to cover the hardware and software. The quality of the evidence showing real understanding of testing, covering all aspects of the unit, is more important than producing evidence for every test undertaken.

Strand (e)

It is evident that a large majority of the candidates still seemed to find it difficult to accurately evaluate the work undertaken in this unit and comment reflectively on their own performance. Even after comments in previous Chief Moderators Reports the main area for concern is still that candidates are concentrating on the performance and structure of their eportfolios rather than the performance of the built, tested and configured system. Feedback from others was often omitted and when present was found to be vague and lacking authenticated evidence of who provided the feedback and why.

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Unit 5: Web Development (6955)

This is the fifth moderation window for this unit and this report should be read in conjunction with previous reports. Previous reports can be found on the Applied GCE ICT section of the Edexcel website:
http://www.edexcel.org.uk/quals/gce/ict/as/8751/

General Comments

Most centres submitted the sample required on one disk and included the esheets and candidate authentication sheets all labelled according the correct naming conventions as detailed in the document "Moderation of ePortfolios: Guidance for Centres" which can be found on the above web link. Many candidates' eportfolios were in the correct file formats, were within the stated file size of 25 MB and most contained a clear index file which started the eportfolio. It was good to see many assessors giving clear feedback in the esheets explaining the assessment decisions made and marks awarded. See the section on admin at the end of this report which details some poor practice relating to the submission of work for moderation.

There was a larger number of entries for this unit than in January and it was pleasing to see that marks reflected a good range from 1-54 with an increasing number of candidates achieving in the higher mark bands and addressing all the strands well. There were also more centres assessing the strands accurately to national standards.

Although most candidates addressed the strands correctly, there are still instances of candidates being placed in too high a mark band for the evidence produced. The Assessment Guidance on pages 89-91 of the unit specification give clarification on how to award the marks for the 3 marks bands across the 5 strands.

There was evidence of centres working to structured assignments that do not provide the opportunity to gain all the marks in all the strands and it would appear that some of the tasks set required the candidates to produce irrelevant material. It is important that candidates undertake assignments that enable them to address the assessment evidence as stated on pages 84-85 of the unit specification.   This is in turn should be assessed according to the assessment criteria on pages 86-88 and marks awarded according to the assessment guidance on pages 89-91.

Few candidates are addressing 5.1 of the unit specification well. This requires the candidates to produce a website for a client or someone such as the assessor role playing the part of the client.   The processes relating to the software development lifecycle are often not well evidenced as the candidates have concentrated on evidencing the website only.   More importance given to this aspect of the unit specification would raise achievement for this unit. This has been pointed out in the previous reports for this unit and, although there is an improvement seen for many centres, this is not the case for all.

Comments on Strand a

It was good to see many more candidates producing project plans and a good number were using project management software which is very good practice and enables candidates to develop the skills required for the A2 unit 6958. Most candidates either used project management software or a spreadsheet which is acceptable for this AS unit. Not all candidates demonstrated they had drawn up an initial plan addressing 5.2 of the unit specification. There was evidence of plans being produced retrospectively which does not allow the candidate to address this strand. Some plans included strands d and e which is not appropriate as the candidates are required to use the plan to help them produce the website for a client.

Many plans did not address 5.2 well as many just listed tasks and did not give thought to the software development lifecycle nor were realistic times given to tasks. A significant number of candidates neglected to clearly indicate the date the website would be completed and handed over to the client.

Very few candidates evidenced the plan being used to monitor their progress throughout the implementation of the website Some evidence supporting this is required if all marks in mark band 1 are to be awarded. The best evidence is updating the plan and including the different versions in the eportfolio complete with annotation explaining updates. Project logs/diaries and minutes of meetings with the client can all support the use of the plan.

Comments on Strand b

This strand was often leniently assessed and the lack of a client in many cases made it difficult for candidates to access the higher mark bands. There are 16 marks available for this strand which addresses 5.3 and 5.4 of the unit specification.

Many candidates appeared to have been given templates with the headings listed under 5.3 which were often completed with very brief information. The emphasis is on the planning spent at the outset of the project which means gathering information and analysing the client requirements. A range of investigative techniques should be undertaken which was rarely seen. Most candidates demonstrated little liaison with a client and consequently did not address this aspect well. Researching similar websites, interviews with target audience, meetings with the client are methods that could be used to raise achievement. Many candidates referred to "my client" and produced unconvincing evidence of such a client. Many questionnaires used were just tick boxes and contained little feedback to help the planning process.

The second part of this strand is the actual design documentation. Candidates often produced storyboards that did not address 5.4. The website designs should include the features to be included and 5.7 can help in this process. Some candidates produced page "mock ups" to give the client an idea of how the site might look which is good practice.

Most candidates produced site maps and some included flow charts showing the pathways through the site. Many included flow charts more suited to strand b of 6952 rather than pathways through the website to be created. 5.4 gives some further clarification on this point.

Comments on Strand c

Most candidates included the website created in the eportofolio but a few neglected to do so.   The website is an essential piece of evidence for this strand and should be included in the eportfolio with a clear link to it.

Many websites were of a good quality and addressed many of the skills listed 5.8 of the unit specification.   However it would appear that the requirements relating to implementation as listed in 5.5 and the final sentence of 5.8 were often overlooked.

This strand has 20 marks allocated to it but this includes the development of the website using prototyping, user feedback and final testing to reach the final version. Again this means that 5.1 of the unit specification needs to be addressed, ie the software lifecycle.

Many candidates appeared not to fully understand prototyping.   This should involve feedback from the user and, ideally, target audience, to refine the design into a working prototype and development into the final product that meets the client needs.   The evidence should clearly demonstrate this process and include evidence illustrating the use of software tools.   Again 5.5 and 5.8 should be referred to.

Some of the prototyping evidenced was very superficial and there was not always clear evidence of the changes that had occurred as a result of prototyping. Before and after screen shots can help support this.   Many candidates just produced an account of what they had done which is implementation without the prototyping being evidenced. References to the client were not always convincing.

Prototyping is a form of formative testing and summative testing is another aspect of this strand.   There was a lack of good evidence supporting summative testing and many candidates just produced "testing tables" that involved links. This is not good evidence and 5.6 should be addressed in order to clearly evidence a range of tests to support the performance of the website. The functionality of the site should be tested against the client needs as defined in the evidence for strand b. In addition to make the testing more comprehensive evidence of the site in different browsers, screen sizes and resolutions could be included.

A range of standards was observed in the sites submitted. Some reflected candidates working at AS level and beyond but others barely demonstrated skills expected from a level 2 candidate.   Standard ways of working is part of this strand and includes quality assurance and legislation.

Comments on Strand d

Overall there was a considerable improvement in the quality of evaluations produced for this strand. However it would appear that many candidates had not read the requirements of this strand, ie evaluation of the performance and functionality of the site and how it meets the client's requirements. Very often candidates evaluated the eportfolio or their own performance which is not relevant to this unit.

There was a lack of understanding of the difference between performance and functionality. Good summative testing should provide the underpinning evidence to support an evaluation of the performance of the website. Candidates should evaluate the site against the client's requirements in order to be able to evaluate the functionality.

There were instances of candidates being awarded marks in mark bands 1 and 2 although they had not referred to feedback from others in the evaluations.

Comments on Strand e

It was good to see many more candidates presenting the evidence for this strand in a suitable format. The evidence requires a Proposal, addressed to the client, recommending how the website that has been produced can be enhanced to include more functionality to support e-commerce. 5.7 gives a list of possible enhancements that might be suitable.

There are 10 marks for this strand which was often leniently assessed. Candidates accessing mark band 2 should have used an appropriate format such as a report, presentation or even a formal letter addressed to the client and well presented.

Many candidates produced evidence which was more the form of general notes on the headings listed in 5.7 instead of selecting relevant upgrades and relating the evidence to the improving the site created for this unit.

Comments on Administrative Procedures

Some disks were received late and long after the deadline of 15 May. Not all centres sent authentication. Some disks received were not labelled correctly, and the correct naming conventions were not followed. There were also a significant number of candidates not producing evidence in the correct file formats, ie html or pdf files. Word files are not an accepted file format. There were also a good number of eportfolios with broken links making the evidence difficult to find.

It should be pointed out that all eportfolios should be sent on ONE disk which contains evidence for 6955 only. This was not the case for all centres.

There were a significant number of esheets which were not totalled correctly and/or had marks which did not reflect the marks submitted online.

Some CDs were sent with no protective packaging and some arrived scratched as a result.

Many eportfolios contained files that did not relate to the evidence required for the 5 strands for this unit resulting in file sizes above the 25 MB allowed.

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Unit 6: Technical Support (6956)

General comments

There was increasing evidence that the requirements of the higher mark bands were beginning to be appreciated by a growing number of centres and candidate work seen supported this. It was again disappointing to see that, some centre assessors are still giving either no, or almost meaningless, feedback. Comments like 'well done' or 'nice screenshots' do not aid either the candidate or the moderator. Assessors are advised to use the e-sheet to explain how they reached a grading decision and to indicate if the candidate worked independently which is a requirement of the higher mark bands.

Strand (a) - Upgrade

There are still a small number of candidates still failing to explain what was being upgraded and the rationales behind them. The most common upgrades were again the installation of more RAM, but few candidates' checked for compatibility or a larger Hard Disk or CD-ROM Drive. Those candidates' who obtained the higher grade bands provided clear screen shots and photographs' explaining through detailed commentaries what was happening. Many candidates still did not include any evidence of relevant testing the upgrade.

The most common software upgrade was once again Windows. Overall the evidence for this was far better than for the hardware but once again, in a majority of eportfolios, only very limited testing was evidenced. Many candidates' restricting their evidence to either the upgrade worked or it didn't work. The quality of the evidence showing real understanding of testing, covering all aspects of the strand, is the more important than a list showing that everything was 'ok'.

Strand (b) - On-screen Support Manual

It is important that candidates are aware of the different user categories the manual is aimed at, in mark band 2 the level of user is an ICT Technician and in mark band 3 the audience for the manual is someone who should be able to use the information provided without having to refer to others for assistance.

The inclusion of step-by-step trouble shooting strategies for **several** potential problems was still weakly covered and unfortunately a minority of candidates still failed to recognise the fact that the manual was to be produced in a format which would enable it to be viewed on screen, a requirement for marks at the top of mark band 1, which resulted in the reader having to continually scroll up and down and in some instances from side to side. These navigational problems and the lack of a realistic and suitable maintenance schedule prevented many candidates moving into mark band three.

Strand (c) - Collaborative Working Tools

As in previous series a large majority of candidates were able to identify and describe the collaborative working tools listed in the specification (section 6.6) it was also noted that many candidates' were including new and more innovative tools. Only a minority of candidates' failed to produce evidence showing the setting up of a collaborative tool.

As stated in previous Principal Moderators Reports and the unit specification it is essential that candidates' who wish to gain marks in mark band 3 must have used a range (at least 3) well chosen examples which fully evaluate the key features **of each of the four** chosen tools. At this level they must be able to show that the chosen tools are totally suitable for particular tasks and fully describe the processes involved in setting up and using a particular tool.

Strand (d) - Communication needs of a small business

Reiterating points made in previous Chief Moderators Reports at mark band one candidates are expected to produce as evidence at least one sensible recommendation about one of the areas being evidenced and for full marks made at least one sensible recommendation for each of the topics. A large majority of candidates failed to produce recommendations for each topic but this was not always recognised during the assessment process.

Candidates' are expected to undertake some investigation into communication needs of a specified small business and then produce a report, in relatively simple and non-technical language, which describes the communication needs of the **specified** small business with justified recommendations for internet connectivity, security processes, security procedures, an internet policy and the use of email. The points are comprehensively listed within the unit specification (see sections 6.4, 6.5 and 6.7).

Unit 7: Using Database Software (6957)

General Comments

The evidence from this series seems to show that candidates are much better prepared for this examination and are better aware of what to expect. Candidates do, however, lose a large number of marks by not providing the correct evidence. There were a number of effective and innovative solutions attempted but many of these failed to get the marks they deserved because there was no indication of how they worked.

Initial comments from teachers on the release of the scenario was that the scenario given was harder than normal however evidence from the candidates' responses is that the system was somewhat easier.

It is probably worthwhile here reiterating what is allowed as regards help and assistance during the exam period. The scenario is released prior to the examination and teachers are allowed to discuss with their students possible answers to the questions. The teacher does not know the final construction of the dataset so that any datasets they give to their students can only really be guesswork. Once the teacher becomes aware of what is in the live data files they should no longer discuss the examination in context although they are allowed to discuss with the students aspects of databases in general terms. For example they can revise normalisation as long as the examination data files are not used as an example. The candidates are not allowed to take anything into their exam sessions or remove anything from the exam room at the end of each session so effectively they have to remember anything they are told. The data files are released early in order for the examination rooms to be prepared.

It should be noted, however, that supplying code for solutions, even in hard copy form, is considered cheating.

Activity 1

A new version of Activity one was in general much more accessible than the previous series. A significant number of candidates, however, answered the question from previous exam papers and lost marks because of it. Candidates should be reminded to read the question and respond to what is asked and not what was asked in their practice papers. On the whole most candidates managed to state the major processes required and more by luck than judgement the inputs. When it came to outputs, however, many talked about the reports and displays rather than the information contained within them.

Activity 2

In general this was a well answered question, a significant amount of candidates scored well on this section. Most candidates identified the four tables but normalisation still seems to be an enigma to most with some of the fields in the wrong tables or even missing. Very few candidates got the mark for the field types completely as they failed to identify that the Bid Successful was a Boolean field.

Validation was accessed quite well and not quite so many candidates were providing a lot of screen prints of the same type of validation. Presence check has been the most often missed followed by range checks.

Although fewer than in previous series candidates are still losing marks when providing evidence of importing the data by cropping the number imported from the bottom of the screen print. Candidates are still wasting time evidencing how they imported the data rather than concentrating on the data after import.

Activity 3

It should be noted that, in this question especially, the ultimate perfectly working solution is expected only from the more gifted students. The mark scheme allocates marks for partially working solutions and it is possible to get a good grade even if the solution doesn't work entirely. It is expected that centres will ground their candidates in possible solutions prior to the live data becoming available. The scenario explains what is required in this activity. Centres should note, however, that any of the systems described can be implemented using standard access functions and wizards. There should be no need to resort to SQL or VBA. Having said that, there are no rules to say that such solutions are unacceptable. Most candidates who submitted SQL solutions showed, not unnaturally, little grasp of what they were trying to do. Some of the VBA solutions were, however, very good and gained a lot of marks.

Activity 4

This activity is an extension of activity three and the comments for the previous activity apply here as well.

Activity 5

This activity was not handled well by most candidates. This is surprising because as a report it was significantly easier to generate than previous series. Many attempted to produce separate reports as has happened in previous series. Very few gained marks for sub totals even fewer produced a report footer with the relevant totals.

Far fewer candidates submitted screen prints than in previous series

Administration

Responses were not always supplied in the way required. A large number of candidates failed to supply the activity number and the other required items in the header or footer of their printouts. There were also a large number of cases where the printouts were supplied in the wrong order. Centres should be aware that examination documents are considered to be the e-portfolio described in the Standard Ways of Working section of the specification (practical restrictions mean it is not possible at present to accept the examination work in an e-portfolio). Not having output correctly labelled or in the wrong order is considered to be not "creating an appropriate structure". Marks are awarded for Standard Ways of Working and students may lose these if their materials are not labelled or badly ordered.

All printouts should be attached to the cover sheet via a **single** treasury tag to the hole available in the top left corner of the inside of the cover sheet as shown in the instructions. There should be no need to punch extra holes in the cover sheet and the treasury tag should be passed through the cover sheet and the printouts only **once**. The instructions are clear and the examiners would be grateful if centres could remind candidates to do this. Candidates should not include rejected work.

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Unit 8: Managing ICT Projects (6958)

General Comments

This is the fifth moderation window for this unit and this report should be read in conjunction with previous reports. Previous reports can be found on the Applied GCE ICT section of the Edexcel website:
http://www.edexcel.org.uk/quals/gce/ict/as/8751/

General Comments

Most centres submitted the sample required on one disk and included the esheets and candidate authentication sheets all labelled according the correct naming conventions as detailed in the document "Moderation of ePortfolios: Guidance for Centres" which can be found on the above web link.   Many candidates' eportfolios were in the correct file formats, were within the stated file size of 20 MB, or 30 MB if multimedia evidence is included, and most contained a clear index file which started the eportfolio.   It was good to see many assessors giving clear feedback in the esheets explaining the assessment decisions made and marks awarded. See the section on admin at the end of this report which details some poor practice relating to the submission of work for moderation.

There were several instances of the evidence for strand b not being in a format that can be accepted for moderation.   This can seriously disadvantage candidates and centres are asked to ensure files are converted to formats as listed in the following link:

http://ict.edexcel.org.uk/home/eportfolios/file-formats/

Most candidates addressed the unit specification which requires each individual candidate to be a Project Manager which involves the creation and managing of a small scale software product.   This year there were a few candidates who submitted group work and some who managed a project that did not involve the creation of a software product.   Such evidence does not address the unit specification and cannot access all the marks available.

Many candidates produced an eportfolio which combined unit 8 with either units 10 or 11.   This is an acceptable practice but candidates are required to ensure there are clear and separate links to the evidence for each individual unit.   In addition, candidates should be discouraged from trying to produce the same evidence for strands a and e for the two units.   The requirements of the strands are different and there are different mark allocations.   Few candidates managed to use exactly the same evidence for both strands successfully.

There was also evidence this year of unit 10 or 11 having been completed and then the evidence for unit 8 being put together retrospectively. This practice does not address the requirements of the unit and should not be repeated.

It was pleasing to see a large number of centres interpreting this specification correctly and assessing to national standards.   Eportfolios covering the mark range of 1-58 were moderated and there were many more candidates achieving marks in the 40s and 50s.

Comments on Strand a

Overall this strand was well assessed and some very good evidence seen. Most candidates produced the two documents required starting with a Project Proposal covering 8.3 of the unit specification. Many candidates then had their Proposal approved by their senior managers before following on with a detailed Definition of Scope incorporating 8.4 and 8.2. Most presented the evidence in suitable formats.

There was still evidence of a number of candidates filling in "writing frames" which is not appropriate for A2 candidates. There were "writing frames" seen that did not allow the candidates to address all the requirements for this stand.

Some candidates did not specify stakeholders clearly and 8.2 should be referred to in this case. There is still confusion as to what the "impact on personnel and practices" means. Many candidates clearly listed the objectives of the project in the Definition of Scope but did not clearly state the key success criteria. Risks relating to the completion of the project should be clearly listed and categorised for those candidates accessing the higher mark bands in strand b.

There were a large number of candidates who did not clearly state the agreed handover date of the product and any deliverables to the client. Once the date has been agreed and included in the Definition of Scope this should be the date which drives the management of the whole project.

Comments on Strand b

It is good to see the majority of centres are now using project management software which is a requirement of this A2 unit and enables candidates to include the evidence required in the plans as listed in 8.7 of the unit specification. A variety of software was used including several suitable programs that are available as free downloads from the Internet.

Candidates need to convert the plans into an accepted file format. Failure to do this resulted in some candidates not producing evidence that could be moderated. Most programs allow the plans to be saved in html format or the plans can be screen dumped. It is important that all the plan can be viewed and not just cropped sections although cropped sections can be successfully used in explanatory notes accompanying the plans.

There were some candidates who had obviously produced plans retrospectively and such evidence does not enable them to address this strand. A plan should be produced once the "go ahead" to proceed with the project has been given. This plan should include details listed in the Definition of Scope document, ie interim review dates, date to hand over the product and deliverables to the client, time allocated to take into account risks. Many candidates just listed tasks in the plan rather than showing how the project was going to be progressed to include the different stages of development of a software product (software development lifecycle) and communication with the range of stakeholders. Many timescales were unrealistic and it was often that the design stage took most of the time with little left for the implementation and final testing. There were still many candidates including the evaluation and submission of eportfolio in the plans – these aspects are not part of the project management of the actual product.

At least two risks should be built into the project plan and this can be done by including slippage/contingency time.   Some candidates included contingency time after the handover of the project which demonstrated little understanding of the process.   The explanation of the risks can be included in the Definition of Scope.

Candidates wishing to access all the marks in mark band 1 and above need to show the plan has been updated and used to manage the project.   This means that candidates need to produce updated plans incorporating changes that have been made during implementation to ensure that the final handover date is kept.

Some candidates changed the end date to suit as they undertook the practical work involved with the production of the software product. This is not acceptable as candidates need to manage the project to meet the date agreed with the client. Many candidates only produced one chart and made no further reference to it.

A good number of candidates produced updated plans but did not explain the changes. There should be some evidence to correlate the plan to the progression of the project. A diary/log or an account explaining the progress of the product and relating the plans to the minutes is one way of doing this. It was good to see some candidates incorporating additional project planning methods in addition to Gantt charts.

Comments on Strand c

Many centres assessed this strand leniently and did not appear to appreciate that the 20 marks requires a range of evidence to be produced.

The strand should clearly document the communication with the stakeholders and also demonstrate how the plan was used to progress the production of the software product.

Most candidates produced evidence of minutes. Many of these minutes were very poorly presented and, in some cases, consisted of templates which does not reflect standards expected from A2 candidates. Candidates should be able to present minutes in a professional format and ensure that the attendees (ie stakeholders) are clearly listed and also the date of the meeting.

Many meetings referred only to the product and were more suited to being prototype minutes for units 10 or 11.   Good candidates did refer to the plan and whether work was on target and what changes needed to be made to the plan.   Better evidence seen was where candidates clearly provided the current version of the plan alongside the record of the meeting and also provided a progress report presented to the meeting linking to the current version of the plan.

Candidates should demonstrate a range of different types of meetings, ie formal meetings with the client, formal interim review meetings with the senior manager and other relevant stakeholders, an end of project review meeting held after the handover of the project with all stakeholders.   Informal communication should also be evidenced. This can be in the form a log of various conversations with the stakeholders and can include peer testing as well as emails.   Many candidates provided contrived emails and memos that did not contribute towards the progression of the project itself but were just informing the date of the next meeting.

It was disappointing to see fabrication present in some of the evidence for strand c. Meetings supposedly held at luxury hotels with Bill Gates, Steve Jobs, managers of premier division football clubs etc are not convincing evidence. There is no need to have a real client but there does need to be someone who is playing the part of the client and a separate person being the senior manager. Peers can be testers and reviewers. Some candidates listed a range of stakeholders in the evidence for strand a but appeared not to have had any subsequent communication with them. Strand c clearly states "communication with stakeholders". Some evidence moderated appeared to be normal communication between a teacher and a student as assignment work is produced.

Candidates would raise achievement in this strand by producing fuller minutes which addressed the requirements of this unit, ie progressing a project according the current project plan and involving and using a range of stakeholders. Many minutes were very brief and referred only to the product.

Many candidates produced minutes of an 'end of project review meeting' but failed to include relevant content to enable strand e to be properly addressed. Where feedback was obtained from the client, and other stakeholders, this often related only to the product.

The following extract from the Examiner's report for June 2007 is still relevant and may prove helpful: "Many candidates produced evidence of several meetings at the very beginning of the Project but then none during the actual implementation of the product. Few candidates included minutes of an End of Project Review Meeting. Another failing that was observed was the lack of content in the Minutes which did not enable candidates to clearly evidence they had adopted a proactive approach to project management. Few minutes referred to the Project Plans. Many candidates ignored the project management process and only minuted details about the production of the product. Good minutes should include reference to both the product and the progress of the project itself. The best way of evidencing the project progress is to refer to the current Plan.

Changes may need to be made to the current version of the Plan and these can form the basis of new targets to be set for the next Plan period. The changes can be updated and a new version produced which will form the basis of the next Interim Review. Feedback given by the stakeholders is needed so the candidate can evidence how this has been acted on.

It is a good idea to have evidence of the handover of the project to the client and this should include feedback from the client.

Candidates need to provide evidence they have taken a proactive approach to managing the project in order to address all the marks in mark band 3. A comment on the esheet by the Assessor can only support the evidence that is in the project management folder which has been produced by the candidate. The content of minutes of the meetings is one source of evidence for this and a project log/diary can also help support this aspect. The Assessment Guidance for this strand explains the requirements for the 3 mark bands.

Some candidates appeared not to understand the purpose of the End of Project Review Meeting and, even if produced evidence of one, often did not include appropriate evidence. This meeting should be held after the Project Handover and be a debriefing of the project itself. Ideally all stakeholders would be present and contribute towards this. The Project should look at the key success criteria specified in the Definition of Scope and make comments on this. There needs to be

evidence of detailed feedback from all the stakeholders as this is required to address strand e."

Comments on Strand d

There is still some misunderstanding as to what evidence is required for this strand. The emphasis is that a product was produced on time using project management methods to achieve this. There should be a software product, and any associated deliverables, included in the folder which reflects an A2 candidate. Many candidates did produce a link to the product produced for units 10 or 11. Some candidates produced a software product not linked to another unit which is acceptable practice. There also needs to be evidence showing the correlation between strands b and c. Evidence from strand e can support the deliverables met the criteria specified in strand a.

It should be recognised that the evidence for the strands in this unit are very interlinked. Many candidates were awarded marks in mark band 3 as the product was there although the evidence for strands b and c did not demonstrate the product was produced using project management methods. It is important that the date set for the handover of the product and deliverables agreed by the client and stated in the Definition of Scope is followed through in the evidence for strands b and c.

There were a number of instances where candidates completed products many weeks before the stated handover date. Such practice does not demonstrate managing a project properly. Again previous reports will provide some further guidance on this strand.

Comments on Strand e

There were many good evaluations produced reflecting candidates working at A2 but very often the evaluations did not reflect the requirements of this strand. If there is no evidence that an End of Project Review Meeting took place, then the marks in this strand cannot be accessed. Many candidates produced minutes of such a meeting but failed to gather and document sufficient relevant feedback to be able to move out of mark band 1.

Candidates should be discouraged from providing a combined evaluation with either units 10 or 11. The requirements for the other units are very different and there is also a different mark allocation for the strand.

The Examiner's report for January 2008 gave the following clarification: "Candidates need to ensure that an End of Project Review meeting is held with the stakeholders used for the project and that full feedback is obtained from them on the 3 topics stated in the assessment criteria, ie

- the success of the project

- effectiveness of project management methods used

- their own performance as a project manager.

The feedback from the stakeholders is essential to enable the evaluation to be produced by the candidate. Many End of Project Review Meetings that were held did not contain much content which, again, hindered the evidencing of this strand."

Comments on Administrative Procedures

Some disks were received late and long after the deadline of 15 May.   Not all centres sent authentication.   Some disks received were not labelled correctly, and the correct naming conventions were not followed.   There were also a significant number of candidates not producing evidence in the correct file formats, ie html or pdf files.   Word files are not an accepted file format. There were also a good number of eportfolios with broken links making the evidence difficult to find.

It should be pointed out that all eportfolios should be sent on ONE disk which contains evidence for 6958 only. This was not the case for all centres.

There were a significant number of esheets which were not totalled correctly and/or had marks which did not reflect the marks submitted online.

Some CDs were sent with no protective packaging and some arrived scratched as a result.

Many eportfolios contained files that did not relate to the evidence required for the 5 strands for this unit resulting in file sizes above the 20/30 MB allowed.

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Unit 9: Communications and Networks (6959)

General Comments

Most centres adhered to the ICE document guidelines which prevents access to the Internet and any electronic storage during the question response session, this succeeded in reducing cut and paste answers however many candidates simply retyped their research material verbatim. The TCPI/IP presentations were particularly obvious examples.

There is no need for centres to send their research folders to the examiner, however they must be kept securely until after the results have been published.

Work must be sent as printouts. CDs or other electronic submissions cannot be accepted.

Comments on individual questions

Activity 1 – Benefits of networks

This activity included diagrams illustrating what both peer-to-peer and client-server architecture might logically look like.

Candidates generally did poorly in this task. Many candidates were able to draw the peer to peer network successfully. This was almost always drawn as a mesh. Client-server networks were usually drawn as a star with the server being used as a hub. This did not gain the mark.

Document explaining the advantages and disadvantages of setting up several independent peer-to-peer networks rather than connecting the Finance Department to the central network.

Most candidates were able to identify a range of advantages of the peer to peer network. Common answers were cheaper as no need for server / administrator, and easy to set up. A minority also produced advantages and disadvantages for client server networks. This was not required.

Answers relating to security were common in both the advantages and disadvantages sections but were often poorly explained. It was rarely appreciated that the default shared folder permissions in a domain is "everyone-full control". This led many to state erroneously that no security was possible on a peer-to-peer network and client-server networks were always secure.

Activity 2 – Components of a network

Notes explaining the function of each component.

Many of the definitions for activity 2 were "text book" and seemed to be dependent on which web site they had used for their research. Candidates should be encouraged to look at more than one source for this type of research.

Many candidates lost marks either because they used an irrelevant section from the information available to them or they shortened or paraphrased the text so inappropriately as to make them unintelligible. Best marks seemed to be obtained by those who attempted to use their own words. Common errors included:

Bridge - attributing too much functionality by confusing a simple bridge with other equipment which includes a bridging function.

Gateway – failing to identify that the networks it joins should be different

Switch – comparing to a bridge instead of hub

Router - no explanation of how a router works, essentially just saying that a router routes.

Server – stating that servers provide services to a client, but then failing to explain what a service consists of.

Your recommendation as to which components will be required for your network together with reasons why others would not be of any use.

This section was well answered with a high proportion of candidates able to make recommendations of network components needed/not needed with reasons why. The recommendations were often mixed in with the component functions and were not always made obvious.

Activity 3 – Network design

A one page design for the total network

This was a question where many candidates achieved a high mark. A lot of candidates showed a good understanding of network design and were able to construct an appropriate diagram showing a layout for the network.

Candidates lost marks for not labelling the devices, not identifying cable types, not showing a wireless access point, and failing to show how the HQ and the housing estates were connected. Some candidates showed a poor understanding of printer connections as they were shown connected to multiple individual PC's.

There were again too many candidates who were effectively showing their server being used as a hub. They had anything up to half a dozen cables going to the server, with presumably a network card for each cable.

Notes justifying each major decision made with regard to the network design

Too many candidates simply described their network diagram, with no justifications as to why they had set things out as shown. Where justifications were given they were generally describing reasons for position of WAPs, switches, and servers, and the reasons for their choice of cable.

A scheme for IP addresses with some indication of the actual IP addresses to be used

Most candidates were able to score some marks in this section as they were able to identify an IP address range and IP addresses for the router and server. Justifications for the choice of class were rare as were explanations of DHCP / static and dynamic addresses.

Notes describing two different methods of connecting the developments to the Head Office

Most candidates did not do well in these sections. This was mainly due to not describing how the method worked either in written or diagram format. Very few candidates drew a diagram to aid their explanations. Those who did generally gained marks from them.

Many referred to using various types of cables or suggested technologies that were not suitable, such as WiFi. It is also unfortunate that "satellite" was taken by many to refer to the dish, with the added confusion in some cases of thinking that microwave dishes are the same as satellite dishes.

Your recommendation as to which method of connection is most suitable

Of those candidates who did have something to choose between, almost all were able to justify their choice on the grounds of cost and / performance.

Activity 4 – IProtocols

The six slide presentation, with speaker's notes, printed out with one slide per A4 page.

Almost every candidate produced a presentation and made some attempt to explain TCP/IP. As with Q2, the highest marks tended to go to those who had tried to use their own words or had at least edited out the irrelevant parts of the original source.

There were far too many "copy and paste" style answers where candidates had clearly used blocks of text from a single source.

Activity 5 – Network management

A contingency plan for the network to include:

Prevention of network problems occurring as a result of natural disasters -Disaster recovery.

Many candidates struggled to put this into the context of the scenario, it was clear that they had been reading up on disaster recovery but far too many discussed un-natural as well as natural disasters, covering topics such as hackers, theft and viruses.

There were some very sensible suggestions made. Most common were to re-locate the server room and/or mount the equipment high up. Waterproof doors were suggested in many cases. Fire prevention and/or early detection was frequently suggested and some were able to specify a suitable type of automatic fire extinguishing system. UPS and back-up generators were common. Surge protectors took care of lightning. Almost all candidates suggested data back-up.

The more able discussed them in more detail to gain expansion marks.

There seemed to be a lack of understanding about disaster recovery and the procedures to follow. Use of backup data and a recovery plan was sometimes mentioned but most candidates stopped at this.

Standard Ways of Working

Most candidates gained both marks however careless marks were lost by putting work in the wrong order.Before every examination series an ' Instruction for the conduct of examination' document is published on the Edexcel website. This document gives guidance to centres about the location of datafiles and the conduct of exams. Centres must read this document before the examination window.

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Unit 10: Using Multimedia Software (6960)

General Comments

There were some very good multimedia products better candidates included excellent videos where candidates produced, edited the video and used sound to good effect.

Some candidates used a website type interface to host a really good multimedia product

Weaker examples are simply websites with a couple of minor components.

Some centres are still submitting very large e-portfolios, in some cases ten times larger the specified 30 Mb. usually this was due to the size of the video file associated with the work. The limit on size was increased this year, candidates should be made aware of this limit and it should form part of the functional specification for the product. Compression techniques are part of the specification and candidates should be taught how to control the size of the multimedia elements.

Centres often combine this unit with unit 8, in which case it is vital that the candidates realise that the two units require different documentation.

Stand (a)

Better candidates had a "real" end user for the product and could therefore produce a detailed functional specification for the client. Many candidates could not achieve mark band 3 because there was no evidence of measurable objectives.

Often candidates did not have a functional specification they included copies of the proposal and scope definition documents from unit 8 – this did not allow candidates to fulfil all of the strand requirements.

The better candidates produced functional specifications with clear and measurable outcomes, the final product was then judged against these and the evaluation made better by referring to them.

Stand (b)

Most candidates had created design documentation that addressed screen layouts. However, there were many instances were candidates had not addressed aspects of the multimedia design and the use of timelines. Considerable work had been completed but only cursory acknowledgement of the proposed multimedia elements (e.g.video will play here).

Designs were often retrospective and candidates often did not improve on designs even when they had gathered feedback on them. For some there was limited evidence of prototyping and refinements to designs.

Better candidates referred to the functional specification, the needs of the user and how this was met by the design.

Those candidates with real users involved them in evaluating prototypes however there was no clear indication where feedback was incorporated.

Stand (c)

The quality of the products was variable. Some were excellent and of professional standard incorporating video and sound editing.

Weaker products had used PowerPoint relying on custom animation effects. This is not regarded as A2 standard work.

Candidates are required to produce a working multimedia product that will function fully away from the development environment. Most met this aim within the context of the eportfolio, from where the product should be launched for the purpose of assessment.

The size of the product should be part of the functional specification, the product design should take the size constraints of the eportfolio into account an the product designed to fit the space available.

Stand (d)

Candidates frequently produced long test plans, and often indicated that the test was successful, however no evidence was given to show to the process of testing had been carried out. Evidence was usually just in a table form and there was no visual evidence to show that the testing had been done. Better candidates provided screen shots to illustrated successful testing.

There is a lack of understanding of testing and the difference between formative and summative testing.

Few candidates did any testing at all related to the functional specification or the clients requirements.

Stand (e)

Evaluations were often far too brief and narrative rather than reflective. Often pupils did not identify strengths and weaknesses and did not discuss the effectiveness of the final solution. Sometimes project management techniques were evaluated instead of the final product for unit 10. The main area of weakness was the lack of evaluation of skill levels and strengths and weaknesses in the area of multimedia.

The evidence in this e-portfolio was often mixed with that for unit 8, it is important that the candidates are aware of the different requirements of the evaluation for this unit. This unit requires the product to be evaluated; unit 8 requires that the project management be evaluated.

Standard Ways of Working

In most cases the only evidence the external assessors had for this aspect the file structures and names used by the candidates.

General Administration

Most samples were correctly submitted with folders clearly labelled with centre numbers, candidate number and first 2 letters of surname and first of Christian name. It would help if the erecord sheet naming convention is the same

The centre assessor should use the erecord as an opportunity to help the moderator find the evidence required to agree the marks given. The comments by centres often contained only 1 line comments, in other cases no comments at all were provided. Where the candidate has combined the work with unit 8 it is essential that the assessor indicated were the evidence can be found for this unit, some parts of the evidence for example feedback, was often hidden in the minutes of meetings for unit 8. This could easily be missed by a moderator who is unfamiliar with the work.

General Comments

Unit 6961 is very straightforward and clearly defined in the unit specification. Comprehensive Examiner's reports on this unit have been published several times indicating the principle weaknesses in interpretation and approach. It was disappointing to find that some centres still do not appear to have considered and implemented the main points therein and/or taken advantage of the other systems in place to support them and their students.

Although there were several examples of very good work, it would appear that some centres still fail to appreciate the main requirements of this unit. 11.1 of the course specification states "spreadsheets are used in all sorts of contexts for tasks involving the analysis and interpretation of complex numerical data, such as: modelling; statistical analysis; cost-benefit analysis; simulation; forecasting; budgeting and planning". Assessment evidence (b) states "appropriate use of functions and formulae to analyse complex data"; both (b) and (c) use the phrase "technically complex spreadsheet". The design, prototyping, development and testing of such a spreadsheet is required – a process which, if completed, will incorporate and address every strand of this unit.

It was disappointing to see that some candidates had not addressed the issue of complexity and had produced solutions that did not reflect A2 standards. These candidates were not able to access many marks in any of the strands. Conversely, some centres and/or candidates are using Visual Basic to address the issue of complexity; in some instances this approach does not address the unit requirements well and restricts the marks available.

One or two centres had adopted a very structured approach with all candidates producing very similar evidence. Whilst it is acceptable for the Assessor to act as "client" and give the same brief to all candidates, the brief should be sufficiently open ended to enable candidates to adopt an independent approach to a solution – as is required for the higher mark bands.

Some centres had used the created spreadsheet solution as the project for Unit 6958. This is good practice but centres should ensure that candidates clearly differentiate between the two sets of evidence.

Many candidates had not adhered to the correct file formats as specified in published Edexcel documentation and innumerable Word files were included in the portfolios. This aspect is incorporated within standard ways of working, a component of strand (c). The final spreadsheet, together with prototype versions, should be included in the eportfolio, as detailed on page 180 of the unit specification.

Comments on strand (a) – Functional Specification

The nature and contents of the requisite functional specification are well explained in section 11.2 of the unit. Good evidence in this strand facilitates effectively

addressing the requirements of all the other strands. Many candidates address this strand very well but, as in previous windows, the majority failed to include details of how they would "judge the effectiveness of the solution" by presenting measurable success criteria. It is quite acceptable for the functional specification to develop – following discussions with a client for example – resulting in several updated versions being submitted. However, far too frequently it was apparent that a 'reverse engineering' approach had been taken to the production of the functional specification.

Comments on strand (b) – Design

11.3 – 11.9 of the unit specification details the aspects to be considered when candidates are designing their spreadsheet product. Very many candidates incorporate the majority of these aspects in their product without acknowledging them in their design work.

Those candidates who address this strand well have detail and clarity in their objectives – strand (a) – and generate prototypes, produce evidence of liaison with a client, develop the product following feedback and fully document the entire process.

As mentioned in strand (a), all too frequently candidates present details of what they have done rather than what they plan to do and how they intend to incorporate complex functions and formulae, future proofing, validation etc.

To address mark band 1, candidates must consider "appropriate use of functions and formulae to analyse complex data". Many candidates referred to functions and formulae in their design work but did not always show these in the prototyping and testing of the spreadsheet as well as within the product itself.

When understood, future proofing was documented and incorporated well into the spreadsheets but not always included in the "Technical Guide".

Validation was often well used in the product. To address mark band 3 the use of at least 4 different measures to validate data and trap errors is required.

Comments on strand c – Fully Working Spreadsheet Solution

To be able to access this strand, candidates must include evidence to show they have produced a "technically complex working spreadsheet". There were some outstanding products demonstrating extensive skills and expertise with Excel and incorporating appropriate complex functions and formulae to analyse numerical data. In some cases centres appear to be addressing the issue of complexity by incorporating extensive use of Visual Basic. The resultant customised product is often far more appropriate for Unit 6912 that this unit. Some limited use of VB is reasonable but moderators cannot be expected to examine code to establish use of formulae.

Conversely, it was disappointing to see, as in previous windows, a significant number of candidates evidencing little beyond level 2 skills in relation to formulae. 2 cell formulae, If statements and vlookups are insufficient on their own in this context.

Some of the products were presented as templates. Although incorporating some very sophisticated embedded complex formulae there was no numerical content. There was a considerable number of products presented at this window that were text based, including interactive games, and much more suited to alternative software. None of these approaches is appropriate, as they cannot reflect a fully working spreadsheet and preclude the opportunity to demonstrate analysis of complex data.

Although often very nicely produced and presented, many of the User Guides did not fully demonstrate the facilities within the spreadsheet nor show that the spreadsheet had been produced to meet the requirements of the Functional Specification.

Technical Guides are often presented as "how to" documents rather than identifying "behind the scenes" aspects of the spreadsheet produced.

Comments on strand d – Testing

The testing material is undoubtedly improving and more and more candidates appear to understand the difference between formative and summative testing. However, several candidates still do not relate prototyping of either the design or the product itself to this strand.

Candidates should be discouraged from just submitting test plans and/or long Word tables merely describing tests on their own. These should be supported by screen prints showing direct evidence of tests having been undertaken, eg testing of validation using test data. A structured and rigorous approach to each test would be evident where candidates have addressed this aspect well – incorporating acceptable, unacceptable and extreme data.

Summative testing can include "end users" working through the User Guide to see if they can make effective use of the spreadsheet produced, a peer reviewer working through the Technical Guide.

As well as functionality, the testing should evidence the spreadsheet meets the requirements of the Functional Specification. The design of the spreadsheet and features and facilities may well change during these processes; if so, the candidate should explain the changes by referring the process back to the "client" requirements and the evidence produced for strands (a) and (b).

Comments on strand e – Evaluation

Some good evaluations were presented at this moderation window but many concentrated on the product rather than addressing the three aspects of the strand. Some candidates failed to acknowledged their client, end user and/or peer tester's opinions. The evaluation needs to relate to the initial requirements and good evidence produced for strand (a) enables a candidate to do this effectively. Many candidates were not able to identify or explain shortcomings of their final spreadsheet. Some of the 'improvements' were issues that should clearly have been resolved during testing.

Many candidates struggled to evaluate their own performance and often produced descriptive detail of what they had done.   Assessing their skill level at the outset and reviewing the skills obtained through undertaking the unit can help candidates evaluate both their skill level and their performance.

General Comments

A significant entry this examination session has led to a wider range of quality in the entries. These have ranged from the occasional centre still submitting work with little or no customisation to some well thought out and executed projects. It is still, however, worth reiterating that we require the projects to involve significant amounts of coding, written by the candidates and not generated, and to contain some complex programming structures. The minimum requirements are some selections (If, Case) and some iteration or loops. It is the latter of these two criteria which is often missing from candidates work and although the moderators will make a judgement on the complexity of the programming if these don't exist, it is difficult to gain the higher mark bands without them.

Most moderators like to examine the application in situ and it would be helpful if a working version can be supplied with any passwords necessary to view the coding and execute the program.

Strand a

On the whole the standard of functional specification is getting better with many centres providing a structure to help their candidates remember what needs to be included. Candidates still have some difficulty specifying measureable success criteria and objectives. At the lower end the candidates tend to concentrate on general objectives such as it should be easy to use and should be predominantly in company colours, missing completely objectives about what the application is to do. The higher mark bands are attained based on how easy it is for the assessor to understand what the application will do.

Although there are not many marks for this strand it is one of the most important and unfortunately the one that is done least well. A good functional specification contains objectives on which the design and build can be based and against which the application can be tested and evaluated.

Strand b

Most candidates consider design to be a collection of hand drawn screen designs. In this unit it is important that we see how the programming is going to be done. It would be difficult to gain the higher mark bands without some kind of structure diagram or process specs such as flowcharts or pseudo code.

Strand c

Most centres are providing projects which are suitable for A2, however some candidates go to incredible lengths to avoid any kind of loop. This leads to vast amounts of repeated code, which by its very nature is inefficient. The principal examiner's personal theory as to why this occurs is that the process hasn't been designed. If the candidate had written their events in pseudo code prior to trying to build the application they may have more understanding of iteration.

Strand d

If the candidate has good measurable objectives in their specification this section is fairly easy. It only becomes complex if the program is not specified well. Evidence of some of the successful tests should be shown. There is no penalty if the program works perfectly.

Strand e

Evaluations are still weak. At A2 there are a significant number of marks for evaluation and many candidates are missing these. Again the key to this is to specify the program properly.

Principal Examiner Report Summer 2008

Unit 13: Web Management (6963)

General Comments

Most of the eportfolios submitted were in the correct file format, easy to navigate and accompanied by eRecord sheets that indicated the reason for the assessment decisions. However in a growing number of cases, the evidence inside the ePortfolio did not match the comments. The eRecord sheet offers an opportunity to explain any judgement calls that the assessor had to make but it was often just a copy of the criteria in the mark band or copied from one candidate to another. Without guidance and clear evidence, the moderator may miss vital evidence with disastrous consequences for the candidate. Centre Authentication Sheets were often again forgotten. Too many centres tried to claim the eight week publication of the web site by merely stating this on the eRecord sheet.

Samples should be provided maximum protection in transit by substantial packaging. Some centres supplied CD's in a folded over envelope that clearly offered no protection at all. Late samples were once again a problem.

The majority of sites produced did promote a service, event or product rather than try to sell it, which is very encouraging to see. There are still some centres that continue to sell fictitious products and offer a prize as part of their site. Sites of this nature are not accounting for legal constraints and eCommerce sites are not to be encouraged due to legal implications.

There is concern over structured evidence that appears common to several centres. Candidates from different centres are producing very similar evidence presented in a very similar manner. It appears that some centres are using common frameworks that do not provide the opportunity to meet several important aspects of the evidence required and asks the candidate to supply additional material that offers little to meet any of the strand requirements.

It is the duty of the centre to ensure that any assignment or project material used allows the candidate the opportunity to meet all evidence required for all strands across all the mark bands.

Comments on strand a – Web Hosting and upload of files
Web Hosting services were generally well discussed using a selection of different hosting companies, but the client's needs were not identified in the majority of reports. Evidence to justify the choice of provider must refer the actual client's needs and not general considerations. Without clear identification of the client, and their web publishing needs, the candidate cannot fully justify the choice of provider.

Uploading and testing of the files once published was much improved with only the occasional evidence of testing the local version.

Comments on strand b – Promoting the website

This strand produced some high quality evidence with evidence that some of the centres had a clear understanding of the requirements. Several candidates critically assessed the strategies using search engine ranking but the use of statistics and user feedback was not very common.

There is however one concern. A substantial amount of the evidence contained techniques that clearly were not suitable. This was not an isolated occurrence and could be the result of some publication or guidance that has been circulated to the centres. Strategies such as "word of mouth", adding a hit counter and updating the content regularly are not suitable visit strategies.

Advertising in newspapers, using leaflet and flyers and including the site address on letterheads all belong to one strategy, cross marketing. If these are discussed, another four types of strategy must be discussed. If used, another different strategy must also be implemented.

If the candidate transfers the files to a local site, such as a college Intranet, the choice of visit strategy is crucial. Candidates often published to an Intranet and applied Meta Tags or hidden text options without realising that the web crawlers that capture this information cannot see it. Cross marketing and shared links with other student sites would be more suitable.

The web site needs to be available to the general Internet public in order to attract web crawler programs and general user feedback. The target audience for an Intranet site will be the college campus and should be promoted accordingly.

Candidates should supply evidence of five measures identified in section 13.2 on page 213 in the unit specification. High hit counter statistics are not essential to access marks in the higher mark bands as a critical evaluation could identify the reasons why the two methods of promotion implemented were not effective.

Comments on strand c – Capturing visitor information
Data capture forms were often high quality and well discussed. Several centres had attempted to combine the forms with a database using active server scripting to some success. This has to be applauded.

Testing was often minimal with only the test posting being presented. Evidence that the special features, such as combo and radio controls, actually worked was often missing. It was still disappointing to see very few real viewers, with many of the tests carried out by the candidate and tutor. Friends, family and fellow work colleagues should be motivated to try the web site and leave real opinions.

Evidence of design was often missing with the reports usually starting from the implementation phase. Candidate's should provide a reasonable amount of evidence that they have applied some consideration to design principles before creating the form.

Comments on strand d – Site Management

The evidence to support this strand was not well assessed. Too many centres allowed the candidate's to publish the site for less than eight weeks and many published just before handing in to the tutor for assessment. The reason for the eight week period

is to give ample opportunity for the visit strategies to take effect in addition to being a prime requirement of mark band one.

Changes to the web site once published should not result from applying eMarketing updates to meet the Unit 13 specification, but should be as a direct result of user feedback, current news, new products or services and web layout improvements.

It was encouraging to see that many of the sites had some form of testing using on-line accessibility tests or software based tools built into authoring applications.

Technical documentation was very weak. The candidate should provide enough information to allow effective future maintenance to take place. The evidence of all updates and a site map is only sufficient evidence for mark band one. Code for special features such as feedback forms, internal and external link lists, passwords to offsite facilities such as hit counters and structures for folders and files are just a small selection of the possible technical information needed that is often missing.

The candidates should use guidelines found in such documents as the Computer Misuse Act and The Data Protection Act to assess whether or not the site complies with the guidelines. Too many examples of general discussion were found that barely mentioned the site created.

Spelling and grammar seen in many of the reports was below the standard required. Candidate must check their work to ensure that obvious errors are corrected. File names and folder structures also need particular attention if the requirements for standard ways of working are to be fulfilled.

Comments on strand e - Evaluation

Evaluations provided very few examples of higher quality work. Where these were found, the candidate had made a clear attempt to gather feedback from users and site statistics in order to support their claims and provide reasons for success and failure. They had discussed their ability to create and manage the implementation of the site rather than discuss their project management skills.

In the majority of cases, they were often over complimentary for no reason and tried to use statistics that did not relate to the web site in any way. It was disappointing to see awards in the upper bands for work that clearly did not meet the level required for Applied GCE.

Too many candidates claimed success when all the evidence pointed otherwise. Even for the highest mark band, a critical evaluation could identify that despite the best efforts of the author the site did not become popular and gathered little feedback.

This would also feed the need for proposed enhancements.

General comments

This unit attracts fewer candidates than other units. The standard has improved over the last few series with fewer examples of programs not meeting the standard required. There some good examples of challenging and sophisticated programs which were well designed and executed.

It is essential that a full listing of the program is included in the eportfolio. Preferably as a text document. Without this it is difficult for the moderator to follow the structure of the code.

A working copy of the program should also be provided.

It is not a requirement for the candidate to produce the functional specification, however one must be included to enable a judgement to made as to how far the design meets the specification.

Stand (a)

Better candidates produced designs that were link to the function specification, and it was clear that the design met the needs of the client.

Good designs included screen designs, showing how the user interacted with the elements of the forms. They also included validation and error handling routines in the design.

Weaker candidates tended to produce designs which were retrospective in nature and sometimes included what were clearly screenshots of the final product, this is not good practice and these candidates could rarely achieve marks higher than Mark Band 1

Stand (b)

The program must be fully working to gain marks above MB1. Evidence for this should be in the form of a complete listing of the program in text form, and a working version of the program in a format that can be used by the moderator

Very few candidates used meaningful variable names in their code, this is a standard way of working and an opportunity to gain marks.

Stand (c)

Candidates frequently produced long test plans, and often indicated that the test was successful, however no evidence was given to show to the process of testing had been carried out. Evidence was usually just in a table form and there was no visual evidence to show that the testing had been done. Better candidates provided screen shots to illustrated successful testing.

There is a lack of understanding of testing and the difference between formative and summative testing.

Few candidates did any testing at all related to the functional specification or the clients requirements.

Some of the better candidates tested the program against extreme and boundary data in their testing.

Stand (d)

The user guides should be two separate documents in the eportfolio.

One for the end user written in non technical terms, better candidates produced guides incorporating screen shots, and numbered instructions. They also included error messages and how to deal with common data entry errors

The technical guide should be written in technical language for another programmer it should enable the reader to understand how the program is structured.

Stand (e)

Good candidates related the evaluation to the program specification, very few candidates made use of feedback from others, which is required to reach MB3. Evaluations were often far too brief and narrative rather than reflective. Often pupils did not identify strengths and weaknesses and did not discuss the effectiveness of the final solution

Standard Ways of Working

In most cases the only evidence the external assessors had for this aspect was the file structures and the use of meaning full names used by the candidates.

General Administration

Most samples were correctly submitted with folders clearly labelled with centre numbers, candidate number and first 2 letters of surname and first of Christian name. It would help if the erecord sheet naming convention is the same

The centre assessor should use the erecord as an opportunity to help the moderator find the evidence required to agree the marks given. The comments by centres often contained only 1 line comments, in other cases no comments at all were provided.

Grade Boundaries Summer 2008

6951	Total	A	B	C	D	E
Raw Mark	60	47	41	35	29	24
UMS	100	80	70	60	50	40

6952	Total	A	B	C	D	E
Raw Mark	60	47	41	35	29	24
UMS	100	80	70	60	50	40

6953	Total	A	B	C	D	E
Raw Mark	60	61	54	47	40	33
UMS	100	80	70	60	50	40

6954	Total	A	B	C	D	E
Raw Mark	60	45	39	34	29	24
UMS	100	80	70	60	50	40

6955	Total	A	B	C	D	E
Raw Mark	60	45	39	33	28	23
UMS	100	80	70	60	50	40

6956	Total	A	B	C	D	E
Raw Mark	60	46	40	34	28	23
UMS	100	80	70	60	50	40

6957	Total	A	B	C	D	E
Raw Mark	60	65	55	45	35	25
UMS	100	80	70	60	50	40

6958	Total	A	B	C	D	E
Raw Mark	60	45	39	33	27	22
UMS	100	80	70	60	50	40

6959	Total	A	B	C	D	E
Raw Mark	60	66	59	52	45	39
UMS	100	80	70	60	50	40

6960	Total	A	B	C	D	E
Raw Mark	60	46	40	34	29	24
UMS	100	80	70	60	50	40

6961	Total	A	B	C	D	E
Raw Mark	60	45	39	33	27	22
UMS	100	80	70	60	50	40

6962	Total	A	B	C	D	E
Raw Mark	60	44	38	32	27	22
UMS	100	80	70	60	50	40

6963	Total	A	B	C	D	E
Raw Mark	60	44	38	32	26	21
UMS	100	80	70	60	50	40

6964	Total	A	B	C	D	E
Raw Mark	60	46	40	34	28	22
UMS	100	80	70	60	50	40