

Applied ICT

Advanced GCE AS H515/H715

Advanced Subsidiary GCE AS H115/H315

Examiners' Reports

June 2011

H115/H315/R/11

OCR (Oxford Cambridge and RSA) is a leading UK awarding body, providing a wide range of qualifications to meet the needs of pupils of all ages and abilities. OCR qualifications include AS/A Levels, GCSEs, OCR Nationals, Key Skills, Entry Level qualifications, NVQs and vocational qualifications in areas such as IT, business, languages, teaching/training, administration and secretarial skills.

It is also responsible for developing new syllabuses to meet national requirements and the needs of students and teachers. OCR is a not-for-profit organisation; any surplus made is invested back into the establishment to help towards the development of qualifications and support which keep pace with the changing needs of today's society.

This report on the Examination provides information on the performance of candidates which it is hoped will be useful to teachers in their preparation of candidates for future examinations. It is intended to be constructive and informative and to promote better understanding of the specification content, of the operation of the scheme of assessment and of the application of assessment criteria.

Reports should be read in conjunction with the published question papers and mark schemes for the Examination.

OCR will not enter into any discussion or correspondence in connection with this Report.

© OCR 2011

Any enquiries about publications should be addressed to:

OCR Publications
PO Box 5050
Annesley
NOTTINGHAM
NG15 0DL

Telephone: 0870 770 6622
Facsimile: 01223 552610
E-mail: publications@ocr.org.uk

CONTENTS

Advanced GCE Applied ICT (H515)

Advanced GCE Applied ICT (Double Award) (H715)

Advanced Subsidiary GCE Applied ICT (H115)

Advanced Subsidiary GCE Applied ICT (Double Award) (H315)

EXAMINERS' REPORTS

Content	Page
Chief Examiner's Report	1
Principal Moderator's Report GCE Applied ICT	2
H515/715 GCE Applied ICT (A2 units)	14
G041 How Organisations Use ICT	22
G054 Software Development	26
G055 Networking solutions	30
G048 Working to a brief	33

Chief Examiner's Report

It was pleasing to see that there was some improvement in the work presented and in teachers' understanding of the marking criteria for G048 and most of the other coursework units. Centres should continue to ensure that the depth and breadth of the work submitted is appropriate for an A level qualification. Candidates need to be taught the analytical skills needed for A2 units in particular.

The importance of a fully and accurately completed unit recording sheet cannot be over-emphasised. Please ensure that both the candidate's name and number are completed and that the total mark indicated correctly totals the individual task marks. Further the total mark recorded on the unit recording sheet and the mark submitted to OCR (either electronically or by completion of the MS1) must match.

There is a worrying tendency for candidates to submit excessive amounts of material for moderation. This can be counter-productive, especially when the work is not page numbered and the evidence referenced on the unit recording sheet, as moderators may well not be able to locate evidence in order to confirm the marks. Candidates should be encouraged to be selective in what they submit and only include what is required by the tasks to demonstrate their coverage of the mark bands.

Candidates did not perform so well across the written papers. The need to apply answers in section A of the written papers is sometimes overlooked and responses in section B of most papers continue to limit the marks that can be awarded. Centres are reminded of the need to teach the concepts covered in the unit content section of the units, as well as preparing candidates to complete the pre-released tasks.

Centres are reminded that candidates should only submit work carried out in response to the tasks for use in the examination. In particular, task 1 must only include what is specified within the task in the candidate instructions and be clearly applied to the relevant case study. General class notes based on the Unit Content section of the unit or material downloaded from the WWW must not be taken in to the examination. If task 1 is completed and made available in the examination, it must be submitted to the examiner with the examination paper.

Please ensure that each task is clearly labelled and that the work is submitted in task order. If tasks are not clearly identified, it is difficult for examiners to locate these tasks in order to mark them.

Centres are reminded that the work submitted in response to the tasks must be each candidate's own unaided work. It is the centre's responsibility to ensure that the work is carried out in conditions that allow the teacher to confirm this is the case. It should not, for example, be given as homework. Care is needed to ensure that candidates do not share electronic files and that teachers do not provide too much direction when helping candidates to understand what they have to do. Whilst they must not mark the work, deadlines for handing in the work should be set so that there is time for the teacher to check the work before signing the Authentication Statement.

Principal Moderator's Report GCE Applied ICT

Principal Moderator's Report AS Units (H115/H315)

General

The majority of the work seen had been assessed with a reasonable degree of accuracy, although there was some slight tendency towards leniency in many cases. Much of the evidence for G040 and G042 demonstrated an improvement on previous sessions, with candidates providing good evidence of planning and development of communications in G040 and of using search engines correctly in G042. Evidence submitted for the double award units (G043 – G047) tended to be of a lower standard. Assessment of these units tended to be less accurate.

Most centres presented work that was well organised with fully completed unit recording sheets, including the centre details, candidate name and correct examination number, clearly recorded marks for each task and an accurate total, page numbers and comments to explain assessment decisions. Such work was easy to moderate. Others presented work that was poorly organised, with no page numbers or annotation to indicate the location of evidence, and with details inaccurate or missing from the unit recording sheet. This severely hampered moderation, as moderators had to virtually re-assess the work, rather than simply confirm the assessor's decisions.

Of those centres that entered candidates using the 01 component code, only a very small number actually intended to submit work via the repository, with the vast majority of the work arriving with the moderator by post. Please ensure that you use the correct component code for all future sessions.

As with paper-based portfolios, some work submitted via the repository was well-organised and easy to moderate. Other work was submitted as large numbers of separate files of different file types and with file names that did not reflect the file content. It is particularly important that the file containing the unit recording sheet is clearly named, so that the moderator does not have to open a number of files to find it.

Although most centres are using treasury tags or other suitable methods to secure the work sent, plastic pockets, plastic folders and occasionally ring binders are still being used by some centres. These should be avoided.

Where centres operate as a consortium it is vital that OCR are informed of this arrangement so that all the centres involved are assigned to the same moderator and the consortium as a whole can be moderated as one centre. It is, therefore, vital that internal moderation takes place between all teachers involved so that invalid order of merit issues are avoided.

Whilst it is acceptable to provide guidance that breaks down the assessment criteria into more candidate-friendly language, care is needed that candidates are not provided with instructions, templates or writing frames that provide more detailed guidance than this. Where the quality of candidates' written communication is being assessed, for example task a in unit G040, the provision of a template would prevent candidates achieving the highest mark band, which requires a well-structured report, as the structure will have been provided for them. Centres should also take into account section 2 of the JCQ 'Instructions for conducting coursework' when they are providing interim feedback to candidates.

Comments on Individual Units

G040 Using ICT to communicate

Much of the work seen for this unit was of a high standard.

Many centres used or adapted one of the sample assignments provided on the OCR website. These gave candidates the opportunity to produce a range of varied communications that would be communicated by different methods, as required by the banner of the assessment evidence grid. These included screen-based communications such as slide presentations and web-based communications such as web pages or blogs. Some centres provided assignments that required candidates to create standard business documents such as letters, invoices, memos and agendas. These do not give candidates sufficient opportunities to demonstrate their abilities to use the range of software, facilities and media required for this unit. 'Content-free' documents such as blank letterheads, business cards and compliment slips are also not appropriate at this level.

Some of the unit portfolios produced for this unit were very extensive. This can be counterproductive as it becomes difficult for the moderator to locate the required evidence. Draft copies of documents should be carefully selected, labelled and annotated to show development. Two or three drafts should be sufficient. Also, whilst the collection and analysis of existing documents to inform the design of the candidates' documents is good teaching practice, these do not need to be included in the portfolio. However, the documents compared in task a must be included in the portfolio, so that the moderator can judge the accuracy of the descriptions given.

Task a

This requires candidates to write a formal report which compares two documents from three organisations. It is vital that candidates choose the same two types of document from each organisation and that a comparison between the three similar documents is actually made. Too many candidates described and evaluated each document separately and then provided a very brief comparison at the end. By doing so they often 'ran out of steam', with descriptions of the later documents lacking the detail provided for the first one or two. Candidates should consider discussing all three documents together so that they can identify the similarities and differences as they complete the report. As well as improving comparisons, this would reduce the repetitive nature of the task and overcome the problem of a document being too good to need improvement, providing others were not.

House style should be considered in relation to the two documents from the same organisation, so that similarities of colour, fonts and use of logos can be discussed. There was a tendency for candidates to discuss house style in relation to a single document, where what they were really discussing was consistency. Although more candidates were able to discuss writing style correctly, they often failed to identify the good and bad points of the writing style used in relation to the purpose of each document.

For mark band 3 candidates need to ensure the reports produced critically analyse the documents and that presentation style, writing style and house style are compared. Critical analysis requires candidates to explain why particular features are good or bad. The explanation should be based on accepted standards wherever possible, rather than just the candidates' own opinions. It is also essential that improvements suggested are relevant, fully justified and related back to the purpose of the document.

Unless the report is being used as one of the six original communications, which is not recommended, it is not necessary to include planning or draft copies of this document

Task b

This requires candidates to plan, draft, create and evaluate six original communications. One of the six communications should describe different methods of communication and the technologies which can be used to support them. This must be planned, drafted and evaluated along with the other five. More candidates did this but there were many that did not.

To achieve beyond mark band 1 of task bi, candidates need to show evidence of planning for all six communications, with some planning being detailed. They also need to have annotated draft copies to show development. Many candidates provided excellent planning and drafting of some of their communications but their work lacked the consistency required for the mark awarded. Detailed planning should include plans for layout (including component positioning and possibly measurements), details of the font styles, colour schemes and content (text, graphics and other media) to be used, along with a possible source of this content. Draft copies to be annotated should be electronic copies of the complete communication to match the designs. Some candidates misunderstood this requirement and produced and annotated several hand-drawn 'drafts' or provided partially completed stages as drafts. Neither is acceptable evidence. Candidates should annotate each draft to indicate changes that they will make to improve it prior to implementing these changes to produce a further draft or the final copy. A hand-drawn exact copy of the final communication is not detailed planning and suggests that this was produced retrospectively. For mark band 3 communications need to be fully planned and drafted. Planning too frequently lacked the required detail so that somebody else could make the communication as planned and annotation of draft documents was poor. It was pleasing to see that the bibliographies produced by many candidates included the required detail for marks bands 2 and 3 but some candidates just include a top level URL or reference search engines as their information sources, which is not appropriate. Mark band 3 requires the precise URL of the web page, the date it was accessed, the date it was last updated and the author (if known). Mark band 2 requires candidates to list all the sources they use. It was not always evident that all sources had been listed.

While some very professional communications were seen, others lacked the quality and consistency required for mark band 3 of task bii. Communications need to be of a consistently high standard with borders and shading used appropriately. Presentations should have simple bullet points and not paragraphs of text in a small font which, on a screen, would be very difficult to read from the back of a room. Documents printed in black and white should have font and background colours chosen carefully to aid viewing. There needs to be some evidence of how information from existing sources has been adapted. This was provided in some portfolios but missing from others. A few selected screen shots showing the original material and the outcome after manipulation is sufficient – for example a picture may have been cropped, re-coloured and merged with other images to create a logo. Prints of the original images and the final logo should provide adequate evidence in this case. Mark band 2 of this task requires that communications are mailable. A letter without such standard content as a date and the recipient's address does not fall into this category.

Many candidates used a range of automation techniques this session and so were able to achieve marks in mark band 3 for task biii, which requires a range of techniques for automating document production to be used. This could include mail merge, auto contents pages / indices, styles which candidates have created themselves and master page layouts for a presentation. Transitions and custom animations in a slide presentation, while contributing to the techniques used, do not contribute to the requirement for techniques for automating document production. Overt evidence should be included to prove automation has been used.

The requirement in mark band 2 of task biii for candidates to create and use a template was overlooked by some or there was confusion over what constitutes a template. Templates are the base of a standard communication which can then be populated with content to ensure a consistent style is achieved. It is not appropriate for candidates to save final communications

with content in them and claim it is a template, nor is it appropriate to include mail merge fields within a template – a letter template's purpose is to write a letter to anybody about any issue from anybody within the organisation, it cannot be assumed that every letter will be a mail-shot to all customers. A template will contain all the common elements and graphics and then have placeholders prompting the user to add content in the correct locations.

Evidence for task biv is improving with many candidates showing on-going evaluation through annotation and reflection on their draft communications as required by mark band 3. Other candidates just provided a description of what they did or only evaluated the final copies and not the drafts. Evaluations should be consistent for all six communications. Evaluation of their own performance was not included by some candidates or it focussed on time management issues. There was also very little on how they would approach a similar task in future in some cases. Centres could encourage candidates to write a final evaluation at the end focusing on how they worked during the whole unit, including the comparison of documents in task a.

The requirements of task bv were better understood than in previous sessions, although some candidates discussed types of information (written, multimedia, graphical, video, audio and web-based), rather than methods of communication (e.g. paper-based, screen-based SMS, e-mail). These are included in the second bullet list on page 15 of the Applied ICT specification. This list is now quite extensive and candidates are advised to initially select at least six methods from this list. They should then also explain how the technologies listed at the bottom of page 15 support their chosen communication methods. There was sometimes confusion between methods of communication and technologies or the technologies were simply identified, rather than described. Some candidates had provided very detailed descriptions of the communication methods but limited the mark that could be awarded by providing little detail about the technologies, while a few had focussed on the technologies at the expense of describing communication methods. The evidence frequently lacked the depth required for mark band 3. Mark band 3 requires candidates to describe at least 6 of the communication methods listed within the specification and their relative advantages and disadvantages. Technologies utilised should be linked into the method rather than being a separate section. It is worth repeating that evidence for this task must form the content of one of the six communications created with suitable planning, development and evaluation. The detail required is more easily achievable if candidates present the information as a report or newsletter, rather than a slide presentation.

G042 ICT solutions for individuals and society

The evidence produced for this unit and the accuracy of assessment showed some improvement on previous sessions but there are still weak areas. Where centres had used or adapted the sample assignments available from the OCR website, candidates had the opportunity to provide appropriate evidence to gain marks. Others used inappropriate assignments that made it difficult for candidates to produce the evidence required or gave candidates too much freedom in their search topic. While the latter approach ensures that there is individuality in the work produced, it may be difficult for candidates to find appropriate large websites and online databases for task b and for the centre to provide a relevant database for task c. If candidates are not investigating an appropriate topic, it can be difficult for them to present the results of their investigation coherently, as required by task e.

In task a candidates must make correct use of the advanced search facilities of search engines and construct their own search strings using operators correctly to gain high marks in this task. It is vital that candidates are taught these skills and that they are assessed accurately. While there was some improvement in the evidence provided and the assessment of this task, too often candidates were awarded high marks in mark band 2 for advanced searches where the same search terms had been entered into each box, which is unproductive.

Find web pages that have...

all these words:

this exact wording or phrase:

one or more of these words: OR

But don't show pages that have...

any of these unwanted words:

INCORRECT The same words have been used in both boxes.

"childrens nursing courses" birmingham OR "west midlands" -adult

Find web pages that have...

all these words:

this exact wording or phrase:

one or more of these words: OR OR

But don't show pages that have...

any of these unwanted words:

CORRECT The candidate has thought about what they are looking for and used the advanced search boxes properly.

While some good use of logical and other operators was seen, some candidates struggled to make correct use of these techniques. Typical errors to be avoided include: using NOT in Google with the first few results including the word which they wanted to omit, not using quotes around phrases, not using spaces properly around + and – operators, entering logical operators in lower case and placing logical operators placed quotes. Errors need to be taken into account when awarding marks for this task as both bands 2 and 3 require the techniques to be used correctly.

[Advanced Search](#)
[Language Tools](#)

INCORRECT Quotes are missing from phrases and spacing for the – sign is incorrect.

 [Advan](#)

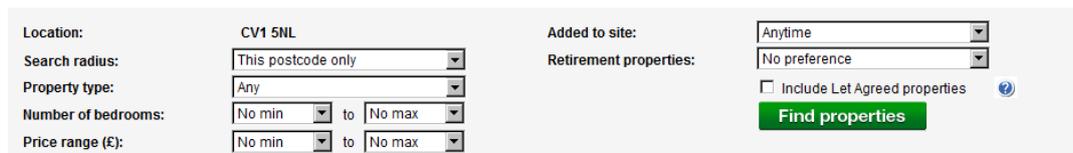
Search: the web pages from the UK

CORRECT Quotes have been used around phrases and the spacing round the + and - signs is correct.

Task a also requires candidates to list the information required before they go looking for it, a detailed comparison of search results and a recommendation of which search engine is the best to use for the investigation. Candidates need to ensure they take a logical approach to this task to ensure that evidence is not missed out. Candidates need to start off by listing the information required – this helps them to focus on the investigation and understand exactly what they are looking for. The next step should be to use simple searches and then the advanced search facility of three different engines in an attempt to find some of the information required. After a few such searches have been carried out it is then expected that a detailed comparison is written which not only compares the number of results yielded but also the quality of the results in terms of the relevance and validity of the information being displayed. It is sensible to suggest that candidates carry out a few identical searches in the different engines to make any comparisons fair. Candidates then need to recommend which search engine they intend to use

for the rest of the investigation and why. For higher marks this needs to be in detail and explanations should draw on the results from the searches and the comparisons made. At this point candidates should use Boolean and other search aides, (listed on page 31 of the course specification), within the chosen search engine only to find all the information required to complete the investigation. These searches should be documented clearly with screen shots showing the terms used and the results.

Task b requires candidates to use large websites to find information for their investigation. Candidates must start off by listing what information is required, as it is otherwise difficult to determine whether the information found demonstrably meets their needs, as required by mark band 3. Not all had done so. It is expected that the online database used is separate from the large website. In some cases candidates had used different parts of the same website to evidence both aspects, which is not acceptable. Candidates need to provide overt evidence of using menus and other navigational aides, rather than concentrating on the use of internal searches. Also, some simple searches using an internal search facility is expected to be included for mark band 2. Many candidates had provided evidence of at least one search of an online database using an advanced search facility but few had provided the range of complex searches required for higher marks. Others had attempted to enter their own logical operators into a standard search box of an internal search engines. This is not appropriate for mark band 3 of this task, as frequently such operators do not actually work. The choice of online database needs to be carefully considered as it needs to offer a good array of operator use by having lots of pull down menus and the ability to enter ranges.



The screenshot shows a search interface with the following elements:

- Location:** CV1 5NL
- Search radius:** This postcode only
- Property type:** Any
- Number of bedrooms:** No min to No max
- Price range (£):** No min to No max
- Added to site:** Anytime
- Retirement properties:** No preference
- Include Let Agreed properties
- Find properties** (button)

An example of an online database which allows candidates to use a range of operators within their searches

Most candidates had been provided with a suitable local database to interrogate for task c but the range of operators used was sometimes limited. In some case candidates had focussed on using parameter queries, wild cards and functions at the expense of searches using a range of logical and relational operators. Candidates must ensure that they provide evidence for the task as a whole, rather than concentrating on the specific requirements of mark band 3. Reports produced should be customised so they present data clearly and neatly – they need to have the correct page orientation for the data being displayed, meaningful titles and ensure fields are wide enough for the data to be fully displayed. It should be clear exactly what the report shows without reference to any other material. It is also expected that reports are printed or, if work is being submitted electronically, output to a portable document file for both mark bands 2 and 3 of this task. Candidates must provide screen print evidence of their queries in design view. However, it is not necessary to include a step by step guide to how they built their queries or, indeed, how they created and edited their reports.

Many well-designed spreadsheets were seen for task d that made good use of complex formulae and functions and used well constructed macros to speed up the input of data and the production of results. Other spreadsheets were too simple for this level of qualification with macros mainly used for navigation. The Amplification of Criteria on page 158 of the specification suggests the types of formulae and functions expected for mark bands 2 and 3. Macros should replace more than one action to be of value. Creating a macro to print a whole sheet is fairly pointless, as the user would only need to click the print button on the toolbar, but creating a macro to print a selected area of the sheet would reduce the number of actions required. It was not always possible to determine whether the spreadsheet was well-designed, as candidates had produced a report on the production of the spreadsheet, with cropped screen shots of the

relevant areas of the spreadsheet or the functions used. Such detailed documentation is not required. Candidates should provide printouts or screen prints of each sheet in both value and formula view and only describe and evidence those features that are not obvious from these printouts. Some very thorough testing tables were seen that covered all aspects of the spreadsheet but not all candidates went on to provide evidence that the testing had been carried out, other than a comment in the table. Other candidates based their testing on whether the macros worked, rather than the accuracy of results produced by formulae. A simple way of illustrating that formulae work would be to replace the data found with dummy data, i.e. 1s 2s or 10s so that it can be easily seen that the formulae work as intended. Alternatively, candidates can do some manual calculations, showing their working out, using the actual data.

Task e was well executed by many candidates. Others provided a description of what they did, rather than what they found out. Mark band 3 requires candidates to produce a well-structured presentation of their results that effectively combines at least five types of information from at least five different sources. The term 'presentation' is used in its widest sense and candidates might find it easier to provide the coherence and quality required by this mark band if they presented the information in a report or newsletter, rather than a slide presentation. As far as possible, candidates should import or copy and paste data from spreadsheets, web pages and other sources into their presentation. It is not sufficient to simply include screen prints. It is the ability to combine different types of information that is being tested. If all the information is included as screen prints, candidates are effectively only combining text and graphics. Some candidates forgot the design and presentation principles learnt in G040 and included far too much information on each slide of a presentation. Candidates must list their sources to be awarded marks in this task and this list should be an integral part of the presentation. Some had created a separate list of sources for the whole unit or had failed to list their sources. Mark band 3 requires a detailed bibliography, which requires the same information included as in task bi of unit G040. In task f candidates need to comment on the way in which they refined the presentation of results. The inclusion of an annotated draft of the 'presentation' with relevant reflective annotation would be helpful to secure marks for this task.

Task f requires candidates to evaluate the methods used to search for and present information. This was evidenced well by some candidates but others provided a task by task evaluation or focused only on search methods rather than the techniques used to both search and present the results. Ongoing reflection is required for mark band 3 and, although this was present in some case for searching, candidates often forgot to evaluate over time how they were presenting what they had found. Although presenting results mainly refers to task e, candidates could also gain marks for evaluating how they adjusted the reports made in task c to suit their purpose better and how, in task d, they adjusted the charts they had automatically generated with a wizard, so the information displayed was easier to understand. Care is needed that candidates actually evaluate the methods used, rather than simply describing what they did.

Task g requires candidates to discuss the impact of the availability of electronic information. There was a tendency for candidate to either focus on generic benefits of the internet or on how their friends and family use it, rather than considering the impacts. Others discussed the impact of the increased availability of ICT and technology in general, rather than focussing on electronic information. For mark band 2, candidates need to research the issues related to electronic information being available outside their daily life. At the very least, this may include looking for a house to buy and how electronic information has sped this process up, although for higher marks wider issues should be considered such as early warning systems and political restrictions. Page 159 of the specification suggests other aspects that could be covered. Mark band 3, in addition, requires candidates to consider what the impact of organisations communicating electronically has on society and to analyse the consequences for people who do not have or do not want access to electronic information. Too often candidates were able to identify who these people were without considering the impact this lack of access might have.

G043 System specification and configuration

Task a requires candidates to investigate and describe in detail what the user wants to do with the system they will specify. This should include detailed descriptions of all tasks together with details of what data will be input and how the output will be presented. Candidates should then consider the types of input and output devices and the software required. For example, they might suggest the need for a scanner or word processing software, rather than specifying the specific version of each, which should appear in task b. There should be a logical progression to this task with candidates considering each task the user wants to carry out, identifying the data that will be input and the type of output required and then suggesting the types of hardware and software that would be needed. Many candidates considered hardware and software first with separate sections for inputs and output requirements. Some concentrated solely on these aspects and forgot to actually describe the tasks the user wanted to carry out. For maximum marks in task a, all types of input and required output should be included in detailed descriptions of all the required tasks and types of hardware and software should also be identified to meet all of the required tasks. This task was often leniently assessed. It is vital that the user requirements are clearly understood, so that candidates can evaluate how well their specification meets these requirements, as required by task g.

In task b, candidates should use these detailed requirements to specify a system that can carry them out the required tasks. The hardware specification should be complete – a processor without a motherboard or tower unit is not much use – up-to-date and include full details of each component being recommended. However, candidates should be discouraged from simply copying and pasting the technical specification from a website. Rather, they should indicate the size, speed etc and why this particular component meets the user requirements. As well as specifying the hardware and software required, candidates must include the specification of any required configuration and designs of toolbars, templates, menus and macros. All of this should form a stand-alone document that could be presented to the user for their approval. While candidates had provided good hardware and software specifications, specification of the configuration changes required was sometimes omitted and designs for toolbars, templates, menus and macros lacked the detail required for higher marks.

Most candidates provided suitable evidence of the practical tasks carried out by providing photographic or screen print evidence supported by a description of what they had done. There was some good use of observation records but these did not always give the individual comments on each candidate's performance needed to fully contribute to the evidence. Testing was often the weakest aspect of this task. Candidates must include a test specification as well as evidence of testing to go beyond mark band 1 and there must be evidence of testing for all mark bands. To achieve mark band 3, the testing must be thorough and there should be clear evidence of how candidates overcame problems found as a result of testing. Testing seen often lacked the detail required for the marks awarded.

Similarly, candidates need to include clear evidence of creating templates, toolbars, menus and macros such as annotated screen prints or printouts. Any screen prints must be large enough for the content to be read. At least one each of all four items must be evidenced to go beyond mark band 1, including evidence of testing. For mark band 3, more than one of each item must be installed and tested; the installed templates, toolbars, menus and macros must be those designed by the candidate and must demonstrably improve the efficiency of the user. An explanation of how the user's efficiency would be improved would be helpful here. In some cases, mark band 3 was awarded when only one of each item had been installed and tested.

Task e is best evidenced by a report or handbook for the user on health and safety and security issues. It should cover the content of the Safety and security section on page 39 of the unit specification. While most ergonomic issues were covered, management issues were not always covered in sufficient detail. Insufficient account was taken of poor spelling, grammar and punctuation when awarding marks for this task.

More candidates correctly addressed task f than in previous sessions, although a little more detail is required. Centres should refer to the 'Basics of software development' section on page 39 of the unit specification. Other candidates are included descriptions of the stages of the Systems Life Cycle. This is not acceptable and no marks should be awarded for this content.

Candidates who approached their evaluation by addressing the evaluation of their specifications and the evaluation of the methods they used for installation, configuration and testing as two separate sections performed well in task g. For further improvement, the first section could appear immediately after the specification, while it is fresh in candidates' minds, and consider how well it meets the needs of the user as identified in task a. For mark band 3, candidates need to show that they have identified strengths and weaknesses in their initial specification and refined it to meet the user's needs more closely. Some candidates evaluated the method used to produce and present the specification, rather than how well it met the user's needs. This may have been because these needs had not been defined sufficiently clearly in task a. The second evaluation could be produced immediately after completing the practical tasks and consider how the candidate went about them, any problems that arose, how these were overcome and, for mark band 3, how they might approach a similar task in the future.

G044 Problem solving using ICT

Some candidates had made a reasonable attempt at producing the evidence required. The majority of centres used one of the scenarios issued by OCR or based their own scenario on one of them. In some cases, the solutions were vague with little mention of either hardware or software.

The key to candidates performing well in this unit is that they apply the knowledge gained from the text book and research to the scenario provided, rather than simply providing theoretical responses. There were good examples of system diagrams, although explanations of the system boundaries and environment lacked detail. Candidates must detail the goals, aims and objectives of their solution in task b, so that they can evaluate, in task g, whether these have been met.

G045 Software development – design

Some candidates provided good evidence for this unit. Others lacked the understanding required, particularly in relation to the feasibility report, data flow diagrams (DFDs) and entity relationship diagrams (ERDs). The sample assignment 'The Perfect Pie' was a popular choice for this unit. Some centres had produced their own assignments, which were equally valid.

Tasks a, b and c

To achieve mark band 3 for these tasks, candidates need to research the tools and techniques available so that they can describe a wide range, possibly going beyond those listed in the unit specification. Although there is overlap between the stages, candidates were often confused as to which tools are used for analysis, which are used for design and which are used for investigation. It may help to consider the 'Structured analysis' section of the unit specification, as far as the first bullet list on page 48, in relation to task a. Although they can form part of analysis, decision tables, flowcharts and structured English are often part of system design, so task b should include these and the content of the 'Design of forms and layouts' section. Task c should include the content of 'The investigation stage' section on Page 46. To gain mark band 3, candidates should explain the advantages and disadvantages of each tool or technique and how it might be used – examples for the given problem can be included here. While some candidates provided good descriptions with well-chosen examples, others provided limited detail in their descriptions or showed a lack of understanding – describing job interviews in task c was an example of this.

Task d

The report for this task should include both feasibility and design. The feasibility report is assessed in task di and the designs in task dii. The alternative solutions considered in the feasibility report should relate to software rather than hardware, although some consideration of hardware should be included. While some excellent reports were produced with detailed alternative solutions and full consideration of technical, economic, legal, operational and social feasibility, others provided very limited alternatives with only a passing consideration of costs and benefits. The number of marks available for this task should be taken as a guide to the depth of evidence required. As with task e in G043, insufficient account was taken of poor spelling, grammar and punctuation when awarding marks for this task. Candidates must include designs for input screens, output screens and reports for task dii. The latter should include consideration of any calculations required to produce the output. Standard design concepts, such as font styles and sizes and the colours to be used need to be considered to progress beyond mark band 1 in task dii. Some candidates produced detailed designs with clear evidence that they had considered standard design concepts. It is expected that these designs will be hand-drawn but candidates should be encouraged to use a ruler to ensure they are neat and easy to follow. If candidates produce designs electronically, they must be designs and not implementations of the forms and reports.

Task e

Most candidates attempted to produce DFDs using formal graphical representation with varying degrees of success. Both level 0 and level 1 DFDs are required for mark band 3. These need to use consistent symbols. The flows/entities represented on the Level 0 must be matched by those expanded in the Level 1, showing a full and complete representation of the current system. Level 1 diagrams did not always match the level 0 diagram. All external entities, data stores and processes must be shown with the links between them being correct. There was some leniency in the assessment of this task where the DFDs produced did not correctly represent the current system or the documentation lacked the required detail. All entities, processes, stores and data flows need to be described in detail to achieve mark band 3.

Task f

Some good ERDs were seen but the documentation sometimes limited the mark awarded. A detailed data dictionary should accompany the ERD to reach mark band 3. A number of ERDs were seen that contained obvious errors, such as entities with several relationships between them, foreign keys turning into primary keys and strange circular relationships, or where many-to-many relationships had not been resolved. Such diagrams are not acceptable for mark band 3 or even, in some cases, mark band 2. Similarly, errors were seen in data dictionaries such as incorrect relationships given or the wrong end of the relationship being identified.

Task g

This task requires candidates to evaluate both the solution and their own performance. Whilst there was sometimes good evidence of one or the other aspect, there was rarely good evidence of both.

G046 Communicating using computers

Although the work submitted for this unit was generally appropriate, there was some lenient assessment, particularly in relation to internet technologies in tasks bi and di, and bandwidth in task c.

Suitable organisations had been investigated for task a, although candidates did better when they investigated a real organisation, such as their school/college, rather than using case study material. The organisations' objectives were not always stated overtly. These can be easily found through mission statements on the company's website or by contacting them directly. Candidates must describe advantages and disadvantages of both internet and intranet use, as well as suggesting several improvements to both to achieve mark band 2. To achieve mark

band 3 candidates must justify the improvements they suggest in relation to meeting the organisation's objectives. Many candidates did not do so. Some candidates had confused an intranet with a shared network drive, particularly when describing their own centre's use. The two are not synonymous and candidates must be taught the distinction between them. It should also be noted that it is the use of the internet and intranet that is to be evaluated, not the organisation's website and the structure and layout of its intranet.

Centres should refer to the 'Internet websites' section on page 54 of the specification to identify what is meant by internet technologies for tasks bi and di. Discussion of HTML is not sufficient. Mark band 2 of task bi requires candidates to describe the use of at least two internet technologies in the nominated website. They must identify where in the website these are used, rather than simply providing a generic description. In mark band 3 as well as explaining the use of the two internet technologies, candidates must analyse how well the purpose of the website is met. This was often overlooked when awarding marks. In task bii, candidates need to do more than simply identify that a particular section of code produces a table or a hyperlink to reach mark band 3. They should explain how the various tags are used and how they translate into the features seen in the browser. Marks were awarded somewhat leniently for this task. Candidates do not need to include the entire code for a number of pages. They could include a screen print of the page as shown in the browser along with a number of relevant sections of the code that they can then explain in relation to the browser image. Care is needed that a sufficient range of different features have been explained. The web pages annotated should be part of the website discussed in task bi, rather than an entirely different site or one they have created.

The quality of candidates' written communication is assessed through task c, so it is vital that candidates produce a single well-structured report to gain high marks. As in other units, insufficient account was taken of poor spelling, punctuation and grammar. Some candidates showed good understanding of the requirements for creating and hosting a website. Other candidates tended only to consider the costs of hosting the site online; bandwidth was given little consideration and candidates failed to describe a range of connection methods, hardware and software. The hardware and software should be that required to produce the website and host it locally. This will include a web server and software, as well as web design software. For mark band 3 candidates should include some calculation of the likely bandwidth requirements and justification of the chosen ISP in relation to technical requirements.

Task di requires candidates to design and create a web page. Whilst they are only required to design and create a single page, candidates should plan the website it will be part of, at least in outline. This should not simply be the creation of a single web page in isolation. Candidates must identify at least two different internet technologies they have used in their web page to achieve mark band 2. Evidence that the site has been uploaded is required for mark band 3, together with a high quality web page and explanation of the internet technologies used in it. Where marking was lenient it was because there was insufficient evidence of the internet technologies used or the same technology had been used twice. Task dii is about evaluating how candidates approached the development and uploading of the web page, rather than the web page produced. This was accurately assessed in most cases.

It is not possible to cross reference the descriptions of hardware, software etc for task e to those for task c, as task c relates to hosting a website, while this task relates to simply accessing the internet and sending and receiving emails. Candidates are only required to install one piece of communication software in all mark bands, although many candidates choose to install more. Differentiation between the mark bands is in how well the installation is documented. For mark band 3, candidates should be producing detailed documentation that would enable someone else to install and configure the software. This should be separate from the evidence that they actually carried out the installation. A detailed witness statement is helpful to confirm the installation and configuration tasks. As with the installation, the differentiation in the browser configuration is in how well the process is explained and illustrated. The email part of the task requires increasingly complex handling of received emails, with the use of filters required at

mark band 3. While candidates had clearly carried out all of the required practical tasks, the descriptions/explanations sometimes lacked the detail required for the marks awarded.

G047 Introduction to programming

There was a wide range of achievement and standard of assessment in this unit. Some candidates had obviously been taught a wide range of programming features, and had used them appropriately. Others only demonstrated a limited range of understanding in tasks a and b, with weak annotations in some cases.

In task a, centres need to ensure that the program listing provided for candidates includes sufficient techniques for candidates to identify. Centres need to differentiate between the two parts of the task. Task ai requires candidates to identify the techniques, e.g. they should indicate where different constructs, such as selection or repetition, have been used, while task aii requires candidates to explain what these constructs do in relation to the program. For example, in the case of modularity, candidates should explain what a subroutine, function or procedure is designed to do, how it is defined and how and when it is called elsewhere in the program.

Task b requires centres to provide candidates with designs for the programs that they will implement. There was little evidence of designs having been provided. Centres may wish to look at the sample assignments provided on the OCR website to see what they should provide for candidates. Most candidates had produced suitable programs for task b. Other candidates only used subroutines built in to the programming languages, such as button click events, but had been awarded high marks. In task bi, for the award of mark band 3, all of the techniques listed in the 'Program structure' section on page 56 of the unit specification must have been used across the programs created, including those to improve the readability and maintainability of the programs. Techniques to improve readability and maintainability in particular were poorly evidenced; including comments using the comment facility of the language, naming variables appropriately and using indentation for selection and iterations would all assist with the readability and maintainability of programs. Similarly, in task bii, the purpose of the programming language used was often not addressed and there was limited description of local and global variables. For task biii, some evidence of testing that the program works as intended would improve the evidence, as would some discussion of the techniques used to improve the efficiency of the coding. Without some evidence of the briefs/designs given to candidates it is difficult for moderators to confirm that the programs meet these briefs/designs.

Most candidates had produced separate reports for tasks ci and cii. However, task ci should discuss a range of programming languages other than the two candidates have used. Some candidates were awarded high marks in this task when they had not described a wide range of languages, or had not explained them in sufficient detail. Apart from discussing the appropriateness of the languages used and analysing their experiences, for mark band 2 in task cii, candidates need to suggest at least one improvement to each program and, for mark band 3, they need to give a valid reason for each improvement. There was limited evidence in the work seen.

H515/715 GCE Applied ICT (A2 units)

Introduction

The introduction to the report for the A2 units should be read in conjunction with the introduction to the AS reports as many, if not all, of the issues are common.

Many centres provided clear details of their assessment decisions. All portfolios should have a fully completed Unit Recording Sheet (URS) with a comment to explain the marks awarded for each task. Page numbers should be completed on the URS.

Some teachers had provided clear annotation to indicate the award of mark bands. This allowed the moderator to provide feedback to confirm if mark bands had been awarded appropriately. Although annotation is not essential, its appropriate use is very helpful and is an example of best practice.

The volume of evidence presented by some candidates was considered to be excessive. On the whole, portfolios produced by candidates that focused on the evidence required frequently scored better when assessed by the teacher. Surplus evidence is more difficult for teachers to assess and moderators to moderate.

Unit G049 Numerical Modelling Using Spreadsheets

More centres correctly identified that the emphasis of this unit is on numerical modelling rather than data manipulation. It is pleasing to note that the proportion of centres failing to focus on numerical modelling was lower than in previous sessions. The problem that the candidates attempted to solve in many cases provided the opportunity for significant numerical processing with a small number of centres focussing on spreadsheet tasks with little numerical modelling. Using a spreadsheet to simply store and present information, e.g. database type solutions that involve little or no data processing are not suitable for this unit as candidates are unlikely to be able to access the marks relating to numerical modelling in the various tasks.

The design specifications produced by many candidates were detailed while in other instances they lacked the necessary detail. At the simplest level, design specifications must incorporate consideration of user requirements, data sources, processing to be carried out and output to be generated. More able candidates incorporated ideas for screen layouts, identification of spreadsheet layout, spreadsheet facilities to be utilised and considered how the numerical processing aspects of the solution met the user requirements. Candidates achieving high marks for task a produced a specification that was detailed enough to enable a competent third party to implement it independently.

The solution implemented in task bi and task bii by some candidates showed clear evidence of the use of complex spreadsheet facilities, as listed on page 63 of the unit specification, as well as clear evidence of a range of spreadsheet functions appropriate to the solution of the problem. Some teachers awarded high marks for task bii when there was little or no evidence of the use of specialised numerical processing functions and complex spreadsheet facilities; marks were adjusted accordingly. Some centres correctly recognised that functions such as lookup functions were part of the common built-in spreadsheet functions and not specialised built-in functions and the candidate was, correctly, restricted to marks in the lower mark bands. Annotation of printouts or a commentary detailing the spreadsheet solution provided clear evidence of the use of the spreadsheet facilities and functions. This in turn provided evidence towards task c, the strategy for implementing the solution. Where no clear evidence could be found, often due to lack of annotation, marks were adjusted downwards as the moderator could not easily locate the use of the functions within the spreadsheet solution.

For task c, the evidence presented often detailed the problems encountered by the candidate whilst developing the spreadsheet solution and how these were surmounted, allowing the candidate to access the marks for this task. The teacher may have been aware of some of these problems over the period of time that the portfolio was generated and encouraged candidates to include the evidence within the portfolio to support the marks awarded.

Testing the spreadsheet solution, in task d, was carried out well by a small proportion of candidates. Such portfolios included clear evidence of planning the testing to be performed and addressed testing functionality with the use of normal, abnormal and boundary data.

The technical and user documentation produced for task e need to be separate documents as they are for different readers; this was correctly presented by the majority of candidates. The technical documentation usually provided sufficient details to allow somebody to maintain or amend the spreadsheet structure. In a small number of cases the documentation provided would not allow this to happen.

A small number of candidates performed well in mark band 3 in task f. In many cases the evaluation was descriptive rather than critical, restricting marks that should have been awarded. Candidates that performed well ensured that the evaluation referred back to the initial requirements of the problem and, in order to access the higher mark bands, considered feedback from users and related the evaluation to the design specification.

G050 Interactive Multimedia Products

It was noticeable this session that most centres appeared to use more appropriate software for the production of the interactive multimedia product i.e. software that allowed the candidate the opportunity to incorporate a variety of interaction within the final product. The unit specification makes it clear that this should be a standalone product; task e requires evidence of the system requirements and how to install and use the product, none of which are fitting for a website.

To access the higher marks in task a, candidates evaluated the commercial multimedia products, rather than describe them; some teachers awarded mark band 3 for descriptions rather than evaluations. There must also be a detailed explanation of how the product influenced the design of the product that the candidates produce. A smaller number of candidates than previous sessions evaluated web-based multimedia products rather than non web-based multimedia products. Some candidates produced evaluations that were descriptive in nature rather than a critical analysis of the products; this restricted the marks awarded to a maximum of mark band 2.

For task bi some candidates produced plans for completely different products; the requirement is to produce different designs for the same product. Content must be considered as part of the plan to access higher marks; some plans seen in this session contained very little indication of content. Some candidates that had been awarded mark band 3 had produced detailed designs, as required.

Task bii required a critical analysis of the designs in order to access higher mark points, not just a description of the designs. Good and bad points of each design need to be identified and a reasoned argument presented to explain why the final design was chosen by the candidate and how it met the needs of the client. Again, an analysis that was not critical in nature restricted marks awarded to a maximum of mark band 2.

Task ci and task cii require evidence of the use of a variety of ICT skills to produce a multimedia solution. The nature of these skills is identified on page 69 of the unit specification. Many candidates failed to identify how they had used their initiative to develop and extend their ICT skills to create a variety of elements to be used in the product. Candidates could annotate their

evidence to explain how the skills have been used and how the skills are aiding the development of the multimedia product. Task ciii required the candidate to bring together the various components into a complete solution. This is where the nature of the multimedia software may restrict the nature of the product developed. A small number of centres continue to allow candidates to create products that are mainly text and image based with little or no interaction.

The testing of the product for task d was carried out to a high standard by a minority of centres. The candidates needed to test not just the functionality of the product, but the fact that the product met the requirements of the design specification.

Task e required candidates to incorporate installation instructions as part of the user guide for the product; the quality of evidence varied from centre to centre. Candidates are encouraged to incorporate images within their user guide in order to clarify the steps within it. The user guide needs to include details of the system specification for the product and details of how to install the product. Some candidates omitted an explanation of what the purpose of the multimedia presentation was.

For task f some candidates critically analysed their solution in order to access the higher mark points. More able candidates provided evidence of obtaining feedback from users that tested the product, as well as providing clear evidence of linking the product to the design specification. Evidence for this task must also incorporate a critical analysis of the candidate's own performance to secure mark band 3.

G051 Publishing

It is important that candidates address all parts of the unit rather than concentrating on the production of the CRC document; some candidates did not sufficiently document the processes involved.

The evidence of the meeting(s) with clients varied greatly in evidence presented for task a. Some candidates could not access real clients so the teacher, or other suitable person, acted as the client; this is acceptable. It is important that interim and final deadline dates are considered to move beyond mark band 1.

It is a requirement of mark band 3 in task bi that candidates explore different means of presenting the same information and use a comprehensive range of editing and manipulation tools. Some candidates were awarded marks in mark band 3 when there was no evidence to support this.

Evidence for task bii and biii sometimes showed clear evidence of the design stage processes. To access marks in mark band 2 in task bii there must be explicit evidence to include the following:

- sketching different initial document designs;
- following housestyle;
- creating master page layouts;
- presenting page proofs;
- producing artwork sketches;
- setting text orientation;
- creating style sheets.

For task biii annotation of evidence generated enabled candidates to access mark band 2, whereas an accompanying explanation enabled candidates to access mark band 3. Many centres awarded marks based on the final product when the candidate had included little or no explanation of the design stages followed and how this enabled the production of the product. Production of the product does not imply any understanding of the process and overt evidence is required.

Higher marks in task ci were awarded where clear evidence of using styles and attributes to produce a publishable version of the agreed design were included. The work of some candidates did not match the agreed design. Candidates are required to evidence editing a piece of imported text. This is best evidenced through careful annotation of the evidence as the evidence should be explicit rather than implicit. Candidates accessing the higher mark points sometimes demonstrated a clear understanding of the design stage processes. A number of centres gave high marks in task ci when the candidate had made use of WordArt; at this level candidates should be using style sheets to control the appearance of the publication and the presence of WordArt in a publication suggests that the candidate has little understanding of the design stage processes. Many candidates had made simple errors in their publications and these had not been identified by the assessor; for example, a contents page with page numbers for the sections of the document, yet the pages of the publication did not include page numbers.

The letter produced for task cii lacked detail in the work of some candidates. The unit specification identifies the required content of the letter.

Task di and dii require analysis of the CRC and how the solution was refined to meet the client's needs as well as an analysis of the candidate's performance. Candidates in mark band 3 sometimes produced a critical analysis, as required. There will be an evaluation, not a description, of the candidate's role in the development of the solution for higher marks.

G052 Artwork and Imaging

Some candidates produced a high quality portfolio of artwork as required for the higher marks in task a. In task a, some candidates failed to include samples of artwork produced to cover the range listed on the assessment grid. A small number of candidates included material which they had not produced but taken from other sources. Mark band 3 was achieved in a number of portfolios where candidates explored the development of the materials using advanced editing and manipulation techniques. It should be noted that it is not necessary to provide step-by-step screenshots explaining how the original images were produced. The referencing for task a must relate solely to the portfolio of artwork and must not include reference to the product developed for the client.

A small number of centres did not ensure that an appropriate product was created for the client. Candidates are required to develop artwork, not publications, presentations, web pages or other such products; other units exist within the GCE Applied ICT specification addressing the development of such items and such evidence should be used for those units. The artwork must be sufficiently detailed to allow the candidate the opportunity to develop artwork and images using a variety of skills listed on page 77 of the unit specification.

Task bi was well evidenced by a small number of candidates where the sketches, in response to the client brief, were detailed and considered the capabilities of the software. In some cases, it was not clear if the client existed; if there is no opportunity for a real client, then the teacher or other suitable person should act as the client. Task bii was difficult to achieve if task bi was poorly evidenced, as it was not easy to comment on the strengths and weakness of the designs. Mark band 3 required critical analysis and not just descriptive comments. Task biii requires candidates to show development of the product and the use of ICT tools, not just to present the final product. Task biv requires explicit evidence that ICT skills have been developed; this was evidenced well by a small number of candidates. A diary can help to evidence this, or alternatively, annotated screenshots can provide evidence. Evidence for task bv varied greatly as some candidates had not considered client feedback in order to access higher mark bands.

Task c required a critical analysis of the final product identifying how well it met the brief; a small number of candidates achieved this. Some candidates made little reference to the brief and some omitted to mention the printer, media or resolution. Candidates that appeared to have

limited experience of working with computer artwork found it difficult to critically reflect on the final product and identify how weaknesses could be tackled in future briefs.

G053 Developing and Creating Websites

For task a, candidates must explain the reasons for choosing, or not choosing, features in web pages examined to be awarded mark band 2, a few did not. In order to access mark band 3, there must be a critical analysis of the web pages examined; a number of candidates had achieved this. Frequently, the evidence provided was solely a description of the web pages visited, meeting mark band 1 requirements.

In task b, candidates were required to identify domain names suitable for the site and, in order to access higher mark points, explain the reason for this name and provide alternative options. It was pleasing to see that a number of candidates had actually uploaded the site designed, although this is not necessary. Task b also required structure diagrams, a story board, an index of pages and a task list/action plan. Frequently some of these components were missing from the candidate work; the most common omission was the index of pages in the website. Only some candidates had sufficiently analysed the website to be produced.

In task c, to secure mark band 3, a full explanation is required to explain the design techniques, hyperlinks, multimedia and interactive features used; a small number of candidates had evidenced this.

Evidence of understanding HTML script in task d was implicit in the work of some candidates rather than explicit. For mark band 2 candidates were required to edit script commands. Evidence to support this could include a before and after screen shot of the implications of the changes as well a narrative to describe the changes; this was provided by many candidates. Mark band 3 requires evidence of adding script commands to include at least two from graphic, table or hyperlink. A number of candidates concentrated on embedding scripting language code, such as JavaScript, rather than editing and adding HTML script. The use of JavaScript contributes to task c and not task d. This has been contained within reports for previous sessions, yet some centres have failed to address this issue.

In task e most candidates ensured that the website met the design specification; explicit evidence of this is required. It is useful if candidates include before and after screenshots if changes are required to the website as a result of testing.

Task f required candidates to produce a critical analysis of their website in order to gain higher marks. An analysis of the candidate's own performance was also required. In many cases the evidence was a description of what they had undertaken, rather than a critical analysis, meeting the requirements of mark band 2 rather than mark band 3.

Unit G056 Program Design, Production and Testing

In task a, some candidates had only briefly identified input, processing and output. This could have been more detailed and would have helped to develop the specification.

In task b a clear description of design work is required; addressing processes, input, output, validation, verification, data structures and file structures. Only a small number of candidates addressed all of these.

Candidates must include evidence in task c to show that they have produced a fully working program. A small number of candidates provided clear evidence of development of skills within this task.

Explicit evidence of testing is required in task d. Evidence presented by some candidates was minimal. Sometimes, whilst a test plan had been produced, there was little clear evidence of boundary data being tested.

To achieve mark band 3 in task e the evaluation must be critical; often the evaluations produced by candidates identified some strengths, weaknesses and areas for improvement with some user feedback, but often lacked depth and critical content.

G057 Database Design

The design produced by candidates within task a must be sufficiently detailed to allow a competent third party to implement the designs if mark band 3 marks are to be considered.

In order to access mark points beyond mark band 1 in task b, candidates must produce a correct entity relationship diagram and, for mark band 3, define the data model clearly and show that it is correctly normalised to 3rd normal form (3NF). Some candidates provided clear details of the entities, attributes, keys, relationships and internally generated or processed data. It should be noted that the use of 'auto-number' primary keys in all entities is unlikely to be an appropriate solution to the database problem. Many candidates provided good evidence to explain how the model was normalised, although this varied from centre to centre.

The data input forms for task c required evidence of data validation and should have been fully labelled in order to access mark band 2; this was evidenced by some candidates. These should also incorporate pull down lists and labels. More able candidates demonstrated the use of forms allowing data entry into multiple tables and customised the database to hide the underlying software.

Candidates were required to evidence the manipulation of data in the database and use queries and reports for task d. More able candidates designed reports with evidence of grouping, arithmetic formulae and used data from more than one table, accessing mark band 3.

The database documentation in task e must enable somebody else to maintain the database. There was little evidence of the use of software generated technical documentation; such documentation does not demonstrate an understanding by the candidate of the evidence generated unless it is annotated. Design documentation created by the candidate often showed a greater understanding of the design of the database for task e.

Testing of the database in task f must include evidence of testing both functionality and rejection of data outside the acceptable range. Where input masks have been used as part of the solution, these must also be tested. Some candidates included high quality testing.

The reflection within task g of how well the database met the specification needed to be a critical evaluation, rather than a description, if the higher mark points are to be accessed. Likewise, the analysis of the candidate's performance needed to be more than descriptive in order to access higher mark bands.

G058 Developing and Maintaining ICT Systems for Users

There is no requirement in this unit for candidates to build a system from components.

Task a requires candidates to plan questions to ask each user. They must use their responses to establish the user's requirements. To achieve mark band 2 in task a, candidates should include detailed questions. Mark band 3 in task a requires more detailed analysis of the user requirements. Candidates must also include supplementary questions. There was good evidence in the work of some candidates of the supplementary questions used.

Candidates need to ensure that they use non-technical language in their reports to users for task b. To achieve mark band 2 in task b, candidates should justify their choice of each component. Mark band 3 in task b requires candidates to provide a detailed explanation of the impact on their recommended system of the compatibility of the components and other factors such as cost etc.

Mark band 3 in task c, requires candidates to upgrade a system where additional components and/or reconfiguration are required, as well as an upgrade that requires the BIOS to be reset. There was good evidence in the work of a small number of candidates. Often this was supported by photographic evidence.

For mark band 1 in task d, candidates should upgrade a system by replacing one component with another that is compatible with the existing system. For mark band 2 in task d, candidates should upgrade a system where the upgrade of one component requires the replacement of another. For mark band 3 in task d, candidates should upgrade a system where the upgrade of one component requires the replacement of another and that requires the BIOS to be changed or upgraded. Only a small number of candidates evidenced mark band 3 in this task. A witness statement can provide supporting evidence for task d; however, it must include details of the activities undertaken by the candidate.

For mark band 3 in task e, it is expected that candidates will index their work so as to allow easy reference in the future. This task becomes difficult to award without clear page numbering and the ability to link a problem with a solution.

Task f requires candidates to consider the accuracy, currency and relevance of the information sources used. Some candidates had done this quite well.

For task g candidates should produce a report which contains comments on how their specifications met the needs of their users and the approach they took to specifying, upgrading and repairing ICT systems. Reports that are descriptive in nature will restrict candidates to a maximum mark in mark band 2.

G059 ICT Solutions for People with Individual Needs

Candidates will produce a report or presentation for ICT solutions which assesses the needs, defines ICT solutions and evaluates the solutions in response to three case studies. Each of the individuals in these case studies will have different needs and candidates need to include one case study that relates to an individual who has sensory needs.

A small number of the candidates had considered the implications of the legislation on the individual in each case study to secure mark band 3.

Task b was, on the whole, evidenced well by candidates; although a small number of candidates did not evaluate the effectiveness of the recommended solution but had been awarded marks within mark band 3 by the centre.

Task c required candidates to produce an analysis of their solutions in order to gain marks in mark band 3. This was done well by a small number of candidates.

Task d required candidates to produce the recommendations in a format that suited each of the users. Some good evidence was presented for this task, although candidates occasionally omitted to provide evidence of verification of the accuracy of the information, as required for mark band 3.

The quality of evidence presented by some candidates for task e was very good. Evidence requirements for task e had been misinterpreted by a small number of centres. Some candidates presented evidence suggesting that limited customisation of the operating system, application software and the hardware had been carried out. Task e requires alternative suggestions to meet the needs of the user; evidence for this is likely to involve consideration of specialist hardware and software that is available to support people with individual needs, rather than relying on generic hardware and software customisation. Candidates with access to specialist hardware and software found this task to be much more accessible.

G041 How Organisations Use ICT

General Comments

In general, candidates performed well in Task 2 and questions 1 to 5 of the question paper, demonstrating some understanding of the case study of Progress Plants. However, candidates did not seem to have the knowledge and understanding of how organisations use ICT to provide suitable responses to Task 3, questions 6 and 7 in Section A and all of Section B.

Some candidates lost marks because they did not apply their responses to the question set – not reading / not understanding the question / not giving the type of response required. The skill of picking out the key points required is something that needs to be taught, as is using the number of marks available as a guide to the number of points they should make.

Centres are encouraged to use the What You Need To Learn section of the unit, as well as previous Examiner Reports, question papers and mark schemes when preparing candidates for the examination. Candidates should also be taught examination techniques to help them provide appropriate answers to the questions. The topics in the Unit Content section of the specification must be taught before candidates sit the examination. Questions in section B can ask about any of the topics covered.

Most pre-prepared work was word processed and most candidates had clearly labelled tasks 2 and 3. All reports for task 3 were word-processed as required. Hand-drawn diagrams are acceptable for task 2 and candidates may benefit from hand-drawing the information flow diagram, or at least hand-labelling the information flows, as marks were sometimes lost due to candidates' inability to manipulate text boxes. However, hand-drawn diagrams should be clearly laid out with candidates making use of a ruler to draw boxes and arrows.

The work taken into the examination must only include the candidates' responses to the tasks set. Class notes, hand-outs and worksheets on aspects of the What You Need to Learn section of the unit must not be taken in to the examination. The requirements of Task 1 change from year to year, so centres need to ensure that the task is read carefully and responded to appropriately. Teachers need to set deadlines for completion of the tasks so that they have sufficient time to check (but not mark) the work carefully prior to the examination.

In addition to checking for material not related to the tasks, centres are reminded of the need to check the work carefully for authenticity before signing the Centre Authentication Form.

The Centre Authentication Form **must** be included with the scripts. If no Centre Authentication Form is received, candidates will not receive their results. The candidate authentication forms, however, **do not** need to be submitted. These should be retained securely in the centre until final results are published. Also, only one Centre Authentication Form is required; it is not necessary to attach one to every script.

Care is needed to ensure that candidates are not given too much guidance when carrying out the tasks. Whilst it is acceptable for teachers to ensure that candidates understand the content of the case study and the requirements of the tasks, they should not give help that relates directly to carrying out each task.

If candidates use a supplementary sheet because they run out of space for their answers, they **must** indicate to the examiner that they have done so. Such sheets easily get mixed in with the pre-released tasks and may be overlooked, possibly losing candidates a significant number of marks.

Comments on Individual Questions

Task 2

This task was well attempted, with many gaining full marks. Five or six senders and receivers were correctly identified by most candidates. Some did not include 'company bank' but were still able to gain full marks by correctly labelling the information flows. When candidates did not gain full marks it was because they had described processes or labelled arrows ambiguously. The first flow in the process from the warehouse manager to administration should have been 'details of goods required'. Many candidates gave 're-order log' or 'order details', neither of which was acceptable.

Care is needed that the information and method for each information flow is identified, rather than described. Where candidates describe the information flow, they often include other processes and lose marks as a result. Some candidates wrote a whole sentence from the case study on each arrow, rather than picking out the information and method from it. Candidates should be advised against this. They need to be taught to use nouns, rather than verbs, to identify the information and method. Whilst 'checked delivery note' is acceptable, 'checks delivery note' is not, as it describes a process. If candidates get into the habit of writing 'delivery note – hand', 'invoice – post' and so on, they are less likely to fall into the habit of describing processes.

Care is needed that information flows are labelled unambiguously. Marks can only be awarded if it is clear which flow a label refers to. Candidates may find it easier to label the flows by hand, rather than manipulating text boxes. Two or more information flows between the same two people must be represented by separate arrows, each unambiguously labelled. Candidates should only include what the task requires. The inclusion of additional senders/receivers and information flows makes the diagram more crowded and increases the possibility of ambiguity.

Task 3

Candidates who scored well in this task recognised that the company wanted to replace an existing mail order facility with e-commerce. Their answers concentrated on those aspects that would be different, such as the method of placing orders, the audience for the e-catalogue compared to the paper one, the procedures for processing orders and the requirement to set up and maintain a secure website. They provided a well-structured response that balanced positive and negative impacts on both the company and its staff/customers, supported by well-chosen examples from the case study. Others had clearly carried out research to find out about the possible impacts of introducing e-commerce but failed to recognise that it was replacing a mail order system; comparing it with the retail outlets and suggesting these might close as a result. Some well-structured responses were seen that were limited to the lowest mark band, as the evaluation was of introducing e-commerce in general terms with no application to Progress Plants.

To improve their performance in this task, candidates need to ensure that they consider both positive and negative impacts on all parties identified in the task in a balanced way and that they explain these impacts by using specific examples from the case study.

Candidates who provided an evaluation of their performance gained most, if not all, the marks available. Others failed to access these marks by not attempting an evaluation. The evaluation should be of the methods used to carry out the research to produce the report, rather than its structure.

Question 1

Where candidates correctly identified one of the two job functions they went on to gain most, if not all, of the marks. The first part of the question required a job function, e.g. 'administration', not a job title, e.g. 'centre administration assistant', but candidates making this error often gave

correct tasks. Candidates needed to identify a correct job function (or equivalent job title) to gain marks for the tasks.

Question 2

Candidates who had identified the various aspects of the Sales and Marketing Director's role from throughout the case study scored well in this question. Others only gave a response based on the initial description on the first page of the case study, which gained only 2 marks.

Question 3

This question required candidates to identify two job roles in the garden centre at the base of the hierarchy and describe the reporting line to the Managing Director for one of them. Candidates who used the organisation structure chart did this well. Others identified individuals at the base of the hierarchy but not in a garden centre or did not understand the concept of a reporting line.

Question 4

a) Where correct items of information were given, the input methods were also correct but candidates need to understand that 'product code' is the item of information; 'barcode' is just the method of storing it.

b) Providing candidates had identified the correct process, parts (i) and (ii) were answered well. Candidates tended to include 'low stock warning' in their answer to b(ii), so gave a different answer in part (iii), such as 'delivery note', so did not get the mark.

Question 5

(i) Hardware: Candidates need to ensure they give specific details of the hardware, as described in the case study, to gain marks for this question. Candidates identified that there were 'tills by the garden centre exit' but not that there were '3 electronic tills'.

(ii) Software: Those candidates who had identified the correct section of the garden centre gained both marks for this question. Others gave answers relating to the systems used by the administration assistant and centre manager. Some candidates confuse hardware and software.

(iii) Input: Most candidates were able to access the two marks allocated to this section of the question. Some gave more than one input, without giving further detail for either to gain the second mark.

(iv) Process: Answers relating to the calculation of the change due were the most frequently given, with candidates gaining both marks available. Others gave a breakdown of how the total cost of purchases was calculated, possibly based on looking at previous questions and mark schemes, but did not indicate 'when total key is pressed' to gain the second mark.

(v) Output: Many candidates were able to gain at least one mark by mentioning 'receipt', with most going on to gain the second mark. There was some confusion between the till receipt and card receipts.

Question 6

Candidates found this question difficult.

(a) Many gained some marks by recognising that there was no record of exactly what had been sold, so staff spent much of their time counting stock. There was also some discussion of human error involved in manual processes but responses were often too vague to gain marks.

(b)(i) Candidates needed to provide detailed and technically accurate answers based on what they have learnt about ICT systems to gain marks in this question. Vague discussions of using barcodes based on general knowledge, rather than technical understanding, were common and gained few marks.

b(ii) Where candidates had gained some marks in b(ii) they were usually able to suggest a possible problem but this was identified, rather than explained, so candidates did not gain the second mark.

Question 7

Where candidates had well-prepared notes in Task 1, they were able to gain most, if not all, of the marks for this question. Others gave general answers relating to breaks, furniture etc, without identifying the steps an employer is required to take to comply with the Health and Safety (Display Screen Equipment) Regulations (1992), so did not gain marks. There was some confusion with the requirements of the Health and Safety at Work Act. While both require a risk assessment, that required by the 1992 Regulations specifically relate to workstations.

Question 8

Candidates needed to demonstrate an awareness of the use of email in a business context to answer this question successfully.

(a) Candidates gained marks for comparing the speed with posting letters and for recognising the possibility of sending one email to many people simultaneously. However, answers were often vague and based on the candidates' own use of email, rather than in a business context. Email is neither instant nor free.

(b) Candidates recognised that viruses and SPAM can be problems associated with using email but these answers too were based on their own use of email, rather than in a business context. Some candidates did recognise that not everyone checks their emails regularly and the consequences of this. Lack of access to the internet or email was not an acceptable answer to this question.

Question 9

Candidates were mostly able to identify some items of information that the delivery company would need. Some answers were imprecise, confused with the ordering of goods or gave documents, such as a delivery note, rather than items of information and these failed to gain marks.

Question 10

a) Most candidates knew that the hours worked must be multiplied by the hourly rate for one mark. Many then went on to describe the deduction of tax for a second mark, although some confuse VAT with tax. A few mentioned the calculation of tax, deduction of pension contribution or addition of overtime pay / bonuses to gain all three marks.

b) Candidates who identified the output as a pay slip went on to describe it and score well in this question, although some focussed on the detail, rather than describing the main elements. Others considered the actual wage or pay cheque (check) to be the output, gaining no marks.

c) HM Revenue and Customs was the only acceptable answer to this question, as it is the only external organisation that organisations are compelled to link with, although variations such as 'Tax Office' were accepted. Candidates who were able to identify the organisation correctly did not understand the purpose of the link sufficiently to gain the second mark.

G054 Software Development

General Comments

It was pleasing to note that many centres had actioned the issues raised in the reports on previous examinations. Once again, there was a wide range of marks on this paper with many candidates accessing the marks available for the pre-release tasks.

Centres are reminded that all answers given to questions in Section A must be applied to the case study; in this case A Clean House, and are not theoretical. However, Section B is theoretical and centres should ensure that candidates have a thorough understanding of the Unit Content to enable them to improve their performance in this section.

The majority of candidates had attempted all of the questions producing good quality pre-release material to help them in Section A of the examination paper. Centres are reminded that the work for Task 1 must only cover the topics listed in the instructions to candidates. A minority of candidates had not fully prepared the pre-release tasks failing to submit at least 1 of the tasks. This strategy disadvantaged those candidates who are unable to access all marks available for the tasks.

There were very isolated instances of candidates not producing work for Task 1 of the pre-release material. There were also some instances where the pre-release tasks for the January 2011 session had been completed. This disadvantaged candidates who were unable to access the marks available for Tasks 2, 3 and 4. Centres are reminded that, although the case study and Task 1 are the same for both examination sessions, Tasks 2, 3 and 4 change from January to June. It is, therefore, vital that the correct candidate instructions are used.

Some questions were poorly answered due to the students not reading / understanding the question. The need to read the question carefully and answer accordingly cannot be over-emphasised. Centres should give candidates some guidance on the key words that are used in a paper i.e. describe, explain and discuss, and the requirements of these key words.

Care is also needed to ensure that candidates are not given too much guidance when carrying out the tasks. Whilst it is acceptable for Teachers to ensure that candidates understand the content of the case study and the requirements of the tasks, they should not be given help that relates directly to carrying out each task.

Centres are reminded that Section B of the paper can focus on any part of the unit specification

Comments on Individual Questions

Task 2

The task required candidates to produce a Rich Picture diagram (RPD) with the start point being given as when a customer contacts A Clean House and the end point being given as when the receipt is sent to the customer. Most candidates managed to start and end the RPD at the appropriate points.

The standard of the RPDs submitted in response to this task was, generally, pleasing. It was obvious that many candidates had thought about the pictures they should use to ensure that the RPD was easy to read and understand. Most candidates used pictures taken from the Internet or provided in graphics packages.

A few candidates failed to clearly identify the customer and the warehouse.

Most of the RPDs produced used pictures consistently. For example, the same picture was used throughout the RPD to represent the customer.

Some of the RPDs produced by candidates were simply a set of isolated pictures and flows with no representation as to how the complete system being represented by the RPD linked together.

Too many candidates failed to achieve any marks for AO4, as they had made no attempt to evaluate the methods used to produce the RPD.

Task 3

This task required candidates to produce an ERD for the proposed system for A Clean House. Most candidates were able to access the marks available for the consistent representation of the entities. However, many candidates failed to access all marks available for the representation of the relationships between the entities by failing to define the Primary and Foreign keys which could be used.

Task 4

Candidates were required to design a user interface for the Cleaning Manager. The Cleaning Manager had requested that the stock levels, to be held on the new system, show the re-order level of each stock item. Some candidates provided designs for the complete system rather than the focus of the task. The emphasis of this task was on the design of the form and not the implementation of the design.

There were a large number of candidates who had produced the evidence for this task using some form of software package. This was accepted unless the screen showed any form of population of fields. If this was present then no marks were awarded for this task.

Section A

Question 1

Many candidates answered this question well. There were, however, instances of generalised purposes such as 'to improve/modernise the business'. Some candidates appeared to be confused about the difference between the purpose and the functions of the new system.

Question 2

The focus of this question was on the user requirements that have been defined by the owner of A Clean House that relate to the suppliers of the cleaning materials.

Many candidates were able to provide responses relating to the re-order levels of each stock item being automatically shown. Candidates failed to access marks by providing incomplete responses which did not provide all required details.

Question 3

The focus of the question was functional requirements. To access all available marks candidates had to explain what functional requirements are and then provide examples of the functional requirements that had been defined.

Many candidates were able to access the marks allocated for explaining the term functional requirements but failed to access the rest of the marks by simply repeating all the reports which had been requested by the owner.

Question 4

The focus of part (a) of this question was on the defined hardware constraint. Most candidates were able to provide answers relating to the inclusion of the existing computers in the new system.

Part (b) of this question then required candidates to identify and describe a further constraint that had been defined by A Clean House. Despite the question stating that software should be excluded in the answer given some candidates provided answers relating to software. Those candidates who did define budget as the process constraint generally accessed all marks available.

Question 5

Many candidates were able to describe the problems caused by the current system at A Clean House.

However, some of the answers given by the candidates were not linked to the suppliers of A Clean House. Candidates who failed to link their answers to the suppliers failed to score marks.

Question 6

This question assessed the candidates' quality of written communication.

Candidates were required to explain how A Clean House can comply with the Data Protection Act. The question asked candidates to relate their answers to A Clean House. Candidates who did this gave some excellent and insightful answers.

There seemed to be a good general understanding about the Data Protection Act. Most understood that they had to do more than list the 8 principles and there was some attempt to link their answers to the case study. Few, however, provided responses clearly linked to A Clean House, in enough depth to score the highest mark band.

Good responses often included, for example, the need to keep customers' data secure. The better answers would then go on to give examples of how this could be achieved; for example, the use of user accounts to provide access rights for different job roles within A Clean House. To reach the higher mark the candidates would then have to, for example, detail that audit trails could be provided by different accounts so that any breach in security could be traced.

A minority of candidates failed to use examples from A Clean House as to how they could comply with the Data Protection Act. This strategy limited candidates to the lowest mark band.

Question 7

To achieve the marks allocated to this question candidates had to identify the maintenance strategy they would use before they gained any marks for their description.

The question provided a situation which the candidates had to use to select the maintenance method. It was worrying that many candidates failed to provide correct responses. Many candidates wrongly identified the adaptive maintenance method – this would be used for changes in the business, either external or internal. Those candidates who were able to identify the correct maintenance method provided good descriptions.

Question 8

The focus of this question was on the logical security method that could be used by A Clean House.

To achieve the marks allocated to this question candidates had to identify the logical security method they could use before they gained any marks for their description.

It was worrying to note that a large number of candidates provided responses relating to physical security methods such as locking the computers away at night.

Question 9

Candidates appeared, from the response provided, to be confused about the purpose of a detailed program specification. Many candidates provided responses which related to the training of staff or staff being able to use the specifications to help them complete tasks.

Section B

As stated previously in this report it was obvious that some centres had not fully covered the requirements of the unit specification and had simply concentrated on the requirements of the pre-release tasks and the case study. This strategy led to candidates being unable to gain marks on Section B of the paper.

Question 10

Many candidates were able to access marks for the description of the direct/big bang implementation method but confused the pilot and parallel methods.

Question 11

Part (a) of this question required candidates to explain the function of an Entity relationship Diagram (ERD). Many candidates were able to access marks for stating that an ERD shows relationships but failed to either use the correct terminology or repeated the different types of relationships that could be used,

Part (b) of this question required candidates to draw and label two components of a Data Flow Diagram (DFD). Many candidates failed to access marks on this part of the question by providing symbols which were used in System Flowcharts rather than those used in DFDs.

Question 12

This question assessed the candidates' quality of written communication.

This question focussed on the use of informal methods of modelling data flows. Many candidates failed to access marks as they provided responses covering the use of DFDs.

Those candidates who did provide responses relating to the informal methods were unable to provide an evaluation (advantages and disadvantages) of the use of these methods of modelling data flows and so limited the accessibility of marks to the low mark band.

G055 Networking solutions

General

Tasks were generally separated and clearly labelled. Notes were completed but in many cases were not related to the case study. Candidates will raise their performance in the examination if they have solid knowledge of the case study scenario to which they are able to refer. Questions about security and internet technologies were generally well answered whereas questions requiring technical knowledge and the use of technical language tended to be poorly answered.

On average the marks for the question paper were higher than the marks for the tasks and there was little difference between the average marks of sections A and B.

Task 2

Many candidates had produced a correct physical topology diagram with an accurate number of computers attached. Candidates lost marks if the diagram was not of a physical topology or if it was not obvious that all components (especially those on separate floors) were actually connected to the network.

A variety of methods were used to show the position of required software installation. Candidates interpreted the application software requirements fairly accurately from the scenario but, in the most part, neglected to expand on this and to include necessary networking software such as server operating systems, network client software, printer sharing software, etc.

Most candidates had included a table justifying the selection of software for the network. This most often included a brief description of what the software does rather than why it is needed and very rarely made any reference to the case study.

Candidates generally evaluated methods used to carry out Task 2 well. Some candidates evaluated their solution or their own performance rather than the methods used.

Task 3

Many candidates missed the point of this task and described either connecting a stand-alone computer to the internet or connecting a computer to a network. Candidates who addressed the question correctly, describing the process of configuring a networked computer to access the internet through a network, (setting IP addresses, subnet masks and default gateways and installing browser software) generally scored over half the available marks. Candidates rarely made any reference to the case study.

SECTION A

Question 1

Candidates were generally able to identify that files can be attached or that emails could be sent to multiple recipients but were unable to identify any use of this facility by RGC.

Question 2

This question was reasonably well answered although answers generally lacked detail. The most popular answers related to costs. Answers referring to the network slowing users down were often poorly thought through.

Question 3

A majority of candidates explained how the given WAN services would be used on a LAN and so did not access any available marks.

Question 4

This question was reasonably well answered. However, a good number of candidates had not read the question carefully and described methods for protecting data that had no relation to technical failure.

Question 5 Part a

This part of the question was reasonably well answered. Candidates were able to describe a peer-to-peer network and a client-server network accurately.

Question 5 Part b

However, when discussing the implications it was often apparent that although a candidate could gain the marks for a text book description, they did not fully understand what a client-server network was. Some described cabling issues and some the costs of installing and maintaining a network in general. Candidates need to fully understand the application of different types of network in real-life situations.

Question 6

Those candidates who understood the meaning of 'media' were generally able to give an answer gaining at least half the available marks. Again, candidates should be able to understand the implications of the use of different types of cable or other media in local area networks. A candidate should not be recommending fibre optic cable for a LAN installation of this size.

Question 7 Part a

Candidates could often identify two functions of a switch but lacked the technical knowledge to expand on this.

Question 7 Part b

Answers tended to concentrate on ability to expand. Very few candidates compared the switch to the hub and even fewer were able to explain the significance of the differences in terms of security or reliability.

Question 8

Candidates were often able to identify a router as the hardware required for sharing an internet connection but answers lacked any further technical detail about what a router does.

Question 9

A number of candidates were able to identify extranet or VPN as a service that could be used but, again, they were not able to describe how the service might be used in a real-life situation. There was a considerable amount of confusion between intranets and extranets.

SECTION B

Question 10

Most candidates were able to identify that broadband allow high-speed data transfer but very few referred to the sharing of the line between users on the network and its effect on the speed of transfer.

Question 11

There was fair amount of confusion about what a problem log is. A number of candidates described a communication log. A high number of candidates explained that a problem log could be used to identify recurring problems (a repeat of the question) but most were unable to suggest how the contents of the logs might be used to do this.

Question 12

This question was poorly answered. Very few candidates were able to identify that the power should be switched off when installing network devices. A number of responses related to users of the network rather than its installation.

Question 13

In order to be able to answer this question successfully, candidates needed a solid understanding of what a mesh network is. Most candidates described all devices being connected to other devices but the rest of the answer often contradicted this description. Many described advantages and disadvantages of networks in general and sometimes of client-server networks.

G048 Working to a brief

General Comments

This report should be read in connection with all previous reports pertaining to this unit. The quality of work seen during this Summer's session was better than in previous years. The main task of choice was either the website or multimedia product. Fewer Centres attempted the spreadsheet task than was previously the case, despite this task being a potentially rewarding one for candidates to follow. The numbers of Centres choosing to follow the Artwork and the Publishing units are also quite low. Again, as with the spreadsheet task, centres are encouraged to consider these units, as both offer challenging and yet potentially awarding tasks for candidates to complete.

The quality of assessment by centres has also improved in recent sessions. Centres are reminded that there is no requirement for them to submit the associated task completed alongside this unit. However, centres must ensure that candidates complete a task taken from the list published each year by OCR.

Comments on Individual Assessment Objectives:

A

Candidates need to research into the issues of which they need to take account when they are working on the final product. These issues should cover the planning and creation of the tasks. This should be seen as the opportunity for candidates to research into all requirements of their solution. As a simple rule of thumb, candidates should be encouraged to produce a report that does not assume any knowledge on the part of the candidate and which, when completed, becomes the central point of reference for all design and content questions pertaining either to the general or specific focus of the task to be completed.

The focus of the current working practice is dependant on the choice of project. However, the content should, in all cases, allow the candidate to gain a clear understanding of what needs to be completed. As a general guide, candidates need to consider the general area of focus – such as how general websites may be designed and created to suit a purpose – as well as the specific focus given by the scenario. In order to research into the focus of the scenario, candidates may consider any materials that give them access to further understanding of the intended focus of their work. For example, a scenario that requires candidates to produce a specific multimedia product may benefit from research into other multimedia or non-multimedia materials that intended to meet a similar purpose. These non-multimedia materials may include, for example, written materials.

Centres are generally accurate with the assessment of this task, although there is a tendency for centres to award full marks when a candidate has produced a single strand answer. For example, the candidate may have produced a report into the specific focus area – such as how culinary traditions are expressed in different forms of media – but not have covered general issues, such as what should be included in any website, irrespective of focus.

Bi

The majority of candidates now include at least one formal planning technique in their work and therefore access marks from MB2. For those candidates who include two or more formal planning techniques, marks from MB3 are available. The vast majority of centres now award this task correctly.

Centres are advised to refer to the syllabus for this qualification for a list of acceptable formal planning techniques. This session has seen the advent of diary software as an attempt to

complete this task. Printouts of diaries are not considered to show the use of formal planning techniques.

Bii

As with all other previous sessions, this marking point is the one which has caused greatest problems for centres. This issue has been highlighted many times in the past, and yet still causes problems.

In simple terms, for Mark Band Three, the detail included in those documents that are taken as being formal planning techniques must be sufficient for a third party, with no further information, to work on and create a product that would be recognised by the author of the planning document as being produced at the correct time and at least close to the document planned. Where candidates have shown that they will produce the main report for page one of a published document on the afternoon of the 20th of April, this is detail. Where they have indicated that they will produce the website during the month of April, this is not.

Candidates at Mark Band Two will be planning to create the final product in somewhat more general terms – such as page one, page two and page three. Where the whole product is planned to be produced over one huge period of time, candidates should be awarded Mark Band One.

Similarly, as with previous sessions, some candidates continue to complete a plan for the whole of the GO48 unit – including, in some cases, planning to complete the planning. However, the numbers doing so have fallen. Centres are advised that planning should be informed by the Current Working Practice report and cease at the completion of the product. Therefore, the planning documents should cover the period from when the candidate has completed their initial research – the current working practice report – through to the end of the production of the Support Materials.

Ci

The diary should cover the same time period as the planning produced for tasks B(i) and (ii). It is incumbent on the candidate to provide evidence in the diary that evidences the skills and results for which we are looking in these tasks. Centres must only award what is present in the diary and should avoid the temptation to mark what they have seen. The content of the diary is being marked, not the performance of the candidate.

Candidates are expected to show that they have both developed and extended their skills and understanding whilst producing their solution to the brief. For mark band 3, candidates must show that they have used initiative in order to make this progress. However, candidates **must** have shown that they have both developed and extended skills before they may be awarded marks from MB3.

Candidates are advised that it should be clear from their diaries whether the new skill they have learnt is a development of a new skill within a piece of software with which they have previously had experience (development) or a skill within a piece of software which is wholly new to them. As such, the diary is a document for claiming marks, and so the onus is on the candidate to ensure that the claim is totally clear.

Centres are aware of the criteria for awarding Mark Band Three for this task, but seem increasingly flexible about what they accept as achieving the criteria. In order to be awarded Mark Band Three, candidates need to show initiative in developing and extending their ICT skills. Therefore, evidence in the diary must explicitly show how the candidate has used their own initiative to achieve this development or extension. Centres are increasingly awarding irrelevant initiative. As an example, a number of centres attempted to award candidates for attempting to come to school, despite disruption from snow. Such behaviour is undoubtedly laudable, but is not the focus of this criterion.

Cii

For this task, candidates need to provide evidence that they have used both informal and formal techniques in order to produce the solution. This evidence may be limited to comments made within the diary, but in the best cases, candidates included examples of emails sent and received, formal agenda for and minutes of meetings held, as well as transcripts of conversations held with advisors or other recognised experts.

Candidates also need to show awareness that the quality of their work will affect others. This should be evidenced through comments in the diary.

This task is generally well awarded by centres. Where centres provide minutes, agenda or emails, it would be helpful if these could be specifically referenced on the URS form.

Ciii

This task is assessed via the complexity of the tasks completed, as evidenced in the diary. In many cases, the marks awarded for this task do not reflect the evidence in the diary. It would seem sensible to conclude that centres are therefore awarding on the basis of what they have seen candidates do, rather than the evidence they have provided in their diary. As mentioned above, the diary is the student's opportunity to claim evidence of what they have done. Centres are advised to make this requirement clear to candidates and to impress upon them the need for all issues to be identified within the diary. In the best cases, candidates include an explicit comment about issues that have been dealt with during each session. Without such clear evidence, it is difficult to accept even that issues have been dealt with, let alone assess the complexity of such issues.

For MB2 and MB3, candidates **MUST** be justifying the actions they have taken. Without this justification, marks must be limited to MB1. In too many cases, candidates are not justifying the decisions they have taken, and yet are being awarded highly. This is an important criteria for this task and must be adhered to.

D

Support materials should be seen as those resources, other than the product itself, that may be passed to the client at the end of the process. This would therefore exclude, for example, test plans and reports.

Centres are advised that for Mark Band 3, the work submitted should be a high quality document which includes evidence that the candidate has gained a good deal of understanding from completing the unit. In this context, a high quality document should be seen as one that would attract marks from Mark Band Three in unit G040. Where candidates produce either a high quality document with little relevant and/or technical content or produce a poor quality document with a good deal of relevant and/or technical content, this should be awarded a mark from Mark Band Two.

E, F and G

All three tasks require the candidate to analyse their work. Where the candidate merely gives a commentary, without analysis, marks from MB1 are appropriate. Reports that generally read like a conversation are to be avoided if candidates wish to access marks beyond Mark Band One.

It is also worth stressing that a very small number of centres continue to complete these tasks as one overarching report. Whilst it is theoretically possible for such a structure to be successful, it is, in practice, unlikely. Similarly, candidates need to be focussed in their reports (a degree of planning before writing would be beneficial in some cases). In too many cases, there is a degree of cross over between Report E and Report F. Each report must stick to the intended focus and awarding for Report E, for example, should not be based on evidence in Report F.

For Report G, the criteria for Mark Band One, Two and Three differ on the source of the comments. Where the candidate, in the report, bases their analysis solely on their own opinion and not the opinion of others, this should be Mark Band One. Where the candidate bases their report both on their own opinion and that of others, this should be awarded Mark Band Two. Finally, where the candidate uses and refers to the thoughts of others alone, and accepts that the clients' views are paramount, this should be awarded a mark from Mark Band Three. Centres should note that it is not sufficient for the candidate to merely carry out research into the thoughts of others, but must include the results of this research in their written report.

OCR (Oxford Cambridge and RSA Examinations)
1 Hills Road
Cambridge
CB1 2EU

OCR Customer Contact Centre

14 – 19 Qualifications (General)

Telephone: 01223 553998

Facsimile: 01223 552627

Email: general.qualifications@ocr.org.uk

www.ocr.org.uk

For staff training purposes and as part of our quality assurance programme your call may be recorded or monitored

Oxford Cambridge and RSA Examinations
is a Company Limited by Guarantee
Registered in England
Registered Office; 1 Hills Road, Cambridge, CB1 2EU
Registered Company Number: 3484466
OCR is an exempt Charity



OCR (Oxford Cambridge and RSA Examinations)
Head office
Telephone: 01223 552552
Facsimile: 01223 552553

© OCR 2011