OCR
RECOGNISING ACHIEVEMENT

GCE

Information & Communication Technology

Advanced GCE **A2 7838**

Advanced Subsidiary GCE **AS 3838**

Report on the Units

June 2007

3838/7838/MS/R/07

Oxford Cambridge and RSA Examinations

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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 syllabus 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.

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REPORTS ON THE UNITS

Chief Examiner's Report

In general candidates seemed well prepared for this year's examination. There was more evidence of attempts at learning definitions and revision being done, though this remains very Centre based. Some candidates are clearly being entered who really require further study before taking the examination. Candidates often know the definitions but are unable to apply the knowledge to contexts provided in the papers. This could be helped by the study of past questions and published answers issued after each session by the Board.

The examiners follow a strict code for the setting of questions and candidates should be made aware of the differences between key words such as state, describe, explain, and discuss. In all written papers for this specification questions which ask for a discussion are often poorly attempted with candidates only providing lists of facts with no real attempt at amplification of points made. Looking for evidence of well argued discussion will be the emphasis for "stretch and challenge" questions in future papers.

The standard of writing and English is often poor and frequently candidates misinterpret the questions. Reading the question at least twice might help. Checking back for the context of the question, and in some cases the context of the whole paper from time to time during the examination might also prove helpful. Candidates are urged to avoid the use of words like easier, cheaper and other comparative terms without making sure they are being used comparatively. Answers should be reread to make sure they answer the question, satisfy the key words in the question, make sense and have enough responses to match the marks available.

The quality of the work submitted for the structured tasks at AS is improving though presentation of these tasks often leaves much to be desired. Centres are requested to follow the advice of the Principal Moderator and OCR on methods of presentation of work, keep to the deadlines – being early is much better than being late – and check the awarding and addition of marks, perhaps by getting a second person to check at least the addition and transfer of marks.

Practical work at A2 continues to improve, particularly in the correct presentation of the projects and the use of a genuine user to form a partnership with the student. Teachers are urged to attend OCR training sessions if they have not been before or need a refresher course and if necessary use the free OCR project consultancy service. Teachers are also urged to read the detailed report given by the Principal Moderator after each session for further useful information regarding the best way to tackle these projects.

2512: Information, Systems, Communications

General Comments

The overall performance of the candidates seems the same as in previous examinations. Most candidates were appropriately prepared for this examination. It was evident that some candidates had learnt sections of the theory by heart but had not learnt to apply this knowledge.

As with previous sessions, the use of requisite language was well documented yet the more technical aspects of the specification, such as networking and databases and the legal aspects were not particularly well known.

There were few candidates who wrote nothing on questions. However, a significant number of candidates frequently ignored, or misread, the questions' wording to their detriment. Another significant problem was a failure to read, and implement, the instructions on the paper's cover sheet including the use of proprietary software names.

Clearly some topics are not being covered adequately. Evidence of having been instructed on the interpretation of keywords was not always to be found in the answers.

Comments on Individual Questions

Question 1

a) (i) Generally well answered with many candidates scoring full marks.

(ii) A large proportion of candidates repeated their answers from 1(a)(i) in the expectation of it achieving marks. The focus of the questions was different.

b) The identification of the cost was achieved my most candidates however they then struggled to describe – adding information about the cost without using the word cost.

Question 2

a) Some very good answers gaining full marks for those that did not use proprietary software names.

b) There was a disappointing lack of clarity from a large number of candidates over the difference between a hardware and a software upgrade with many confusing them.

c) It was obvious that students were unaware of a plotter or its function. In general the use given of both devices was generic and not related to the scenario in the question. Unless answers are contextualised, they will not gain full marks.

Question 3

a) The number of candidates who are still of the belief that a telephone number is a number is worrying, particularly at this level. The names of data types used by candidates demonstrated a lack of detailed knowledge or grasp of technical terms.

b) (i) Many candidates failed to read the question and gave descriptions rather than identify. It was unfortunate that a number of candidates, who did not know the answer, were of the opinion that the following question gave them the answer – and wrote check digit. As a general rule, the answers to previous questions are not given away further down the paper.

(ii) A large proportion of candidates gave vague answers representing a lack of knowledge on this topic.

c) Many drew the input output diagram without linking it to the question – scoring no marks. Those that thought about the question achieved full marks.

Question 4

a) Once again question which come from the area of the specification which covers technical elements were poorly done. Some candidates were able to identify types of user interface but their answers lacked description or depth.

b) Many candidates confused self documenting software with the next section in the text book which describes supplementary user documentation. Their descriptions of the documentation were vague and with regard to warranties, licenses and health and safety guides, often incorrect.

c) This was poorly done with the majority of candidates failing to understand the role of the driver.

d) Configuration files were not understood by the candidates and as such their answers lacked detail or clarity.

Question 5

a) (i) Generally well answered with many candidates scoring full marks.

(ii) A large proportion of candidates confused their terminology and talked about databases and records rather than tables.

b) This was very poorly done with few candidates scoring full marks. There was a lack of knowledge, very little contextualisation and a lot of repetition of their answers.

c) This should have been two easy marks however the candidates answers lacked clarity and became repetitive, often repeating the same answer twice.

Question 6

a) Most candidates drew and correctly labelled a star diagram. There were however a few diagrams with no labels and a few diagrams that did not represent a star. Fortunately these were in the minority.

b) The function of the protocol was badly answered with the majority of candidates describing it. It is important that the question is read properly and candidates do not try and relate it to a previous question and give a learnt mark scheme which does not fit.

c) This was poorly done with the majority of candidates failing to be specific enough to gain marks.

Question 7

a) Once again the inability of candidates to compare at this level was apparent. Depth and detail were missing and in some cases, the comparison made was on two completely different aspects.

b) The difference between facilities and use is fundamental to this question. Some candidates picked up marks inadvertently by including facilities in their descriptions of use but the majority failed to read the question properly.

Question 8

a) Candidates were able to communicate an awareness of the crimes but lacked the in-depth knowledge to gain credit.

b) (i) Once again there was confusion over the CMA, DPA and the rights of individuals. There was also a lack of detailed understanding of the separate principles. Candidates often gave half a principle or a whole principle over two or more lines.

(ii) A large proportion of candidates repeated the principles. A few candidates gave two correct legal rights but there was a significant percentage of candidates who failed to understand the rights of customers.

Question 9

Whilst accepting that candidates may not have experience of the BCS or a professional body, some of the responses gave an indication that they were unaware of any of the services provided.

Question 10

This type of question is now common as the final question on the paper. It was hoped that over time candidates would understand the requirements of a discuss essay however this has not proved to be so. Whilst most candidates realise that ‘discuss’ questions necessitate two viewpoints, nearly all responses were a succession of identified impacts. Few candidates were able to expand upon these impacts and develop an answer that included a progressive explanation of just why they were advantageous or disadvantageous to the individuals in question. A large proportion of candidates focused in on the portable technology devices and did little more than list the advantages and disadvantages of those devices rather than focus on the impact on the individual. Few candidates went further than ‘always in contact’ or ‘can always communicate’ – neither of which gains high marks.

Discussions with very little substance left no reference material upon which to base a satisfactory conclusion. The resultant weak ending was, too often, not worthy of an award.

2513: Structured Practical ICT Tasks

General Comments

Presentation of work by Centres has continued to improve even further this year with hardly any centres sending work in ring binders. The use of plastic wallets is reducing further still and is much appreciated. Most centres are now encouraging candidates to put task numbers on each page and this helps a lot. The quality of work from candidates is still improving significantly and this is clearly due to improved teaching standards, training from OCR, more specialist teachers and most importantly increased ICT skills of students. There were some excellent sets of tasks submitted by many centres and the quality of work produced by candidates showed that they had pride in their work as well as having learnt some very good ICT skills – including the less obvious skills of documentation and testing.

As last year, the vast majority of Centres used the official cover sheets and official mark schemes which helped the moderation process immensely. The use of annotation by most Centres helped to identify where marks had / had not been awarded – in particular the use of numbering of mark points on the mark scheme assisted centres in this process. Where annotation was not included, the moderation process proved to be very difficult. In general, centres who don't annotate do tend to have marks adjusted more than those who do annotate. This is usually due to incorrect interpretation of the mark scheme and insufficient evidence of marks being justifiably awarded. Virtually all centres are using the correct cover sheets and mark schemes per candidate and those who have not been have been reminded in their reports.

Clerical errors are still a problem. It is extremely important that Centres ensure the marks on the MS1 match those on the Cover Sheet and that those on the Cover Sheet are added up accurately on both sides and match those on the Mark Scheme. It is essential that Centres get this right as it is their responsibility to ensure the marks given to OCR are accurate. If changes are made to marks then they should be applied to all paperwork.

Centres are reminded to read the explanatory notes in the mark scheme as these give a lot of detailed advice on how to mark the tasks.

The mark scheme this year was a lot tighter than previous years with fewer 'extra' marking points available. Many questions only had the number of marking points available as the number of marks. This is particularly helping to differentiate candidates at the A/B grade end of the scale.

It was usually clear which centres were experienced at delivering this course and which centres would benefit from training. This was also reflected in the quality of the work produced by candidates. Centres doing this course for the first time should note that students are not required to annotate and explain every aspect of their work – only what is asked for in the mark scheme. This should help candidates to achieve a better work-life balance and provide time to focus on preparation for the examined units.

Comments on Individual Tasks

Task 1

(a) (i) This first question proved to be a very good differentiator. With only 9 marking points available for 8 marks, candidates were achieving at all ranges from about 2 marks to 8 marks. Most candidates knew to write about colours, styles and sizes and did this in some depth. The more able candidates thought about how a design specification should apply to a presentation in particular.

(ii) Most candidates did quite well on this question because the mark scheme was fairly open. It was strange though to see in the work of some candidates that presentation software required such powerful computers! Candidates who researched what Microsoft PowerPoint or similar requires did the right thing, although copying and pasting the requirements from the MS website is not appropriate.

(b) (i) This was completed very well by virtually all candidates.

(ii) Candidates tended to get mark points 27 and 28 about the timing, but many forgot to annotate anything about the transition itself.

(iii) Most candidates achieved marks for this question. However, candidates should be aware that duplicating slides will only work if a slide is duplicated several times and not just once.

(c) This was a good differentiating question. Candidates usually got mark points 34, 35, 36 and 38. The A and B grade candidates tended to be the ones getting higher marks as they were more accurate in their descriptions and remembered important things such as identifying how to position a new slide as well as just inserting it.

Task 2

(a) (i) This question was well answered by most candidates. It was sometimes difficult to find the actual evidence as annotation was required for the feedback section. Candidates need to be encouraged to provide instructions more as some centres had all their candidates producing instructions whilst others didn't have any.

(ii) This was the first year that OCR has insisted upon row and column headings being present. This was in response to centre feedback where centres wanted to be able to check the accuracy of formulae and functions. Most centres realised that without row and column headings being present that they could not award any marks here, but some didn't comply with this instruction. Where annotation is required, it is not optional and marks can only be awarded if annotation is present. Most candidates did very well with the IF and COUNTIF or similar functions.

(iii) Most candidates were quite capable of setting up protection for a worksheet. Most were also able to identify how they locked cells. However, candidates were asked to show how the spreadsheet was set up so that "patients can only select input cells" – many candidates didn't think to show evidence of the input cells being unlocked and this is what mark point 14 was for.

(b) (i) The test plan still proves to be an excellent differentiator of candidates between A and E grades. A grade candidates tend to get 6 out of 6 with E grade candidates getting 1 or 2 marks. Unfortunately, many centres still have great difficulty marking this and differentiating between good and poor tests. Good tests are those which have specific input values (eg "Jane") identified and the location where that should be input (eg Question 1 answer). Expected output should also be specific values. Many candidates used inputs like "4 correct answers and 6 incorrect answers" – a tester would not know what was correct and what was incorrect or which rows to put each on – therefore the test plan would be insufficient. Centres are encouraged to attend training where a number of examples of acceptable and unacceptable testing are given.

(ii) For each test, candidates can only get the mark in b(ii) if they got the mark in b(i). Candidates are also required to clearly annotate the input value and output value. Where this was done correctly by candidates, they achieved well.

(c) Most candidates surprisingly did well on mark points 42 and 45. As in previous years, the more able candidates think about the fact that the spreadsheet needs to be opened and exactly where to get it from – they also remember that it needs saving. The skill being tested for this question is the ability of candidates to produce documentation and clear instructions. Therefore the description of how to change questions must be good in order to gain a mark. Glossaries are getting better, but candidates should be taught to include words that are specific to the documentation they are producing. Troubleshooting is a mark often only achieved by A and B grade candidates. Candidates should think about 'real' problems that the user is likely to encounter. When changing questions and answers, the user shouldn't be needing to correct formulae as they should be correct in the first place. This question proved to differentiate candidates well.

Task 3

(a) The majority of candidates got this question right, although many added a relationship between admission and nurse. This did not stop them from gaining full marks as the mark scheme has to be positive.

(b) (i) Most candidates were able to achieve all 5 marks. It was surprising that many centres didn't read the note at the bottom of the page and as a result didn't award any marks between marking points 8 to 11. It was pleasing to see that candidates are being taught well that telephone numbers are text data types.

(ii) This question proved to be achievable by almost all candidates.

(c) (ii) Candidates must be reminded by their teachers that when annotation is required, it must be given. It would be advisable for centres to remind candidates to annotate if they forget to do so as this will help them get marks that they deserve. It's very disheartening to see candidates losing marks because they haven't followed basic instructions.

(iii) Most candidates achieved well in this question. Some centres were a bit harsh with the marking of this question, but generally it was fairly straight forward.

(d) (i) This question differentiated candidates well, with some getting full marks and others achieving at the lower end. Some candidates were able to separate data onto separate pages and almost all were able to show the nurses for each ward. The name of the ward as a title was a bit contentious as some centres were looking for it to be at the top in the centre and bold etc, but it just needed to be clearly visible at the top somewhere and stand out slightly in order to be a title. Candidates were asked to show the number of nurses at the end of the report, but some showed the number of nurses in each ward. Candidates will always achieve better if they are trained to read questions properly.

(ii) This question was only really for the A-C grade candidates and it proved to be the case. Some D grade candidates were able to get one mark by doing something which was good to see because at least they've had a go. Where it was done properly, it was clear to see that candidates used similar methods depending upon their centre. This suggests they've been taught the skills that they need and are then applying them appropriately to these tasks. However, centres must be careful not to give too much guidance to candidates.

(iii) Again, this question was only for the high ability candidates but again, one mark (descending order) was available to all candidates. Candidates who got the full marks for this question did very well and it was pleasing to see work of a high standard.

(e) (i) This question was answered well by some centres but not very well by others. This suggests it was dependent upon how centres interpreted the question. The question clearly asked for a 'diagram' to design the 'structure' of the menu interface. Some centres had candidates showing the layout of the screens and assumed that words such as "wards", "nurses" etc meant that there were links to other screens. However, candidates needed to show these links using arrows or similar.

(ii) Candidates tended to do very well on this question.

(f) This question proved to differentiate candidates more than expected. Where candidates attempted this question and gained mark point 46, they tended to also get mark points 48 and 49. Most centres used Microsoft Access and there is a label wizard within the reporting facility – however, many centres don't seem to be aware of this. It is accessible by clicking the new button, rather than the link to create a report by using a wizard.

Task 4

(a) (i) This task differentiated students' design skills quite well. More able students remember that instructions are necessary and that names should be made atomic by separating them into forename and surname.

(ii) Most candidates were able to achieve all 3 marks here if they used web editing software. However, there seemed to be a misconception in many centres that Microsoft Excel is capable of creating web forms. Whilst Excel can save pages as HTML, these pages can not be used for data input.

(b) (i) This was a high-level design question and again differentiated candidates well. Most were able to get mark point 8 – clicking the submit button. The next level of candidates were able to identify that error messages were necessary and confirmation pages were necessary. Only the A/B candidates were able to clearly identify the validation routines appropriately. This required decision boxes such as "was the surname field empty?" rather than "was the surname valid?" – the first of these examples is clearly identified, the second is not.

(ii) Like (a) (ii), candidates were only able to achieve these marks if they chose appropriate web editing software such as Dreamweaver, Front Page or Front Page Express (although there were other good examples used). Candidates achieved marks where they were able to identify the field being validated and the validation rule being used.

2514: Practical Applications of ICT Using Standard/Generic Applications Software

General Comments

This is a scenario-based paper and as such candidates should give examples, when asked for, in the context of the scenario. In some cases it was evident that the candidates had some knowledge but were unable to apply this knowledge to the context of the questions. Failure to do this leads to candidates failing to be awarded marks for examples. Some candidates are still using terms such as cheaper, professional and faster without any explanation or qualification

The examination technique of many candidates hindered their ability to score marks – centres must practise examination technique and assist the candidates to understand what is required by the command words such as discuss, explain, describe, state and so on.

There appears to be a general lack of knowledge of technical terminology relating to applications. There is no doubt that candidates are able to manipulate applications in a practical manner but are unable to apply their practical skills in a theoretical situation.

Even though candidates were asked not to mention specific brands of software, many did. Many candidates seem to be under the impression that there is only one type of computer in existence with one operating system. It is important that all areas of the specification are covered to ensure that candidates have a wide range of knowledge.

Comments on Individual Questions

1 (a) The most common correct answers related to the geometric and mathematical aspects of vector graphics or that vector graphics can be scaled without loss of quality. Many commented on file size and compared vector graphics with Bitmap graphics. There were many instances of candidates providing uses of vector graphics – this was not the focus of the question and so these answers gained no marks. It was worrying to note that many candidates provided answers saying that vector graphics contained pixels.

(b) This question was relatively well answered although many candidates felt that copyright was an advantage. There is still a tendency by many candidates to use the terms cheap, free or professional without justification.

(c) This question was well answered by most candidates. Many candidates gained full marks for using the terminology within the mark scheme although their description of the creation processes often lacked clarity

(d) This question was not well answered by the majority of candidates with most candidates only gaining 1 or 2 marks. Many candidates gained marks for identifying that grouping ‘puts items together’ and then ‘moves them as one’. Few went beyond this level of description without repeating the same points again. It was worrying to note that many candidates provided answers relating to ungrouping.

(e) Candidates either provided a textbook response, or confused their descriptions for brightness and contrast. Many candidates could not describe these two terms and used the words black & white, sharpness, edges, blur, incorrectly in their answer. Many candidates, however, were able to describe the fill feature correctly.

2 (a) Generally this was poorly answered, with few candidates gaining more than half marks. Many candidates were able to gain the 1st mark for identifying a reason but failed to get any more marks for their explanations/examples. Most candidates gained marks for queries/searching and reports but the examples given were not always in the context of the scenario or were too vague.

Many gave answers about relational databases which gained them no marks or talked about manual systems, (from the question), eg "takes up less space", "easier to edit/back-up etc". Many students gave characteristics of a database rather than stating why it was suitable to use.

(b) Candidates answered both parts of this question reasonably well with many obtaining high marks. Candidates tended to gain better marks for the custom-written software than the off the shelf software.

(c) Candidates either provided a textbook response or simply left this question blank. It was clear which centres had covered this part of the specification and which had not by the range of answers from the candidates. The question was, however, very poorly answered especially 2nd and 3rd NF. Many candidates provided responses relating to data rather than fields.

(d) Not many candidates seemed to know what a data dictionary is with the weaker candidates providing answers relating to an English language dictionary. Those candidates who did provide correct responses could identify a component but could not describe it adequately to gain the second mark. Again it was clear which centres had covered this part of the specification and which had not by the range of answers from the candidates.

(e) This question was generally answered well although some candidates failed to state the relationship (part iii) correctly. There were some candidates who failed to copy the keys required in parts (i) & (ii) correctly – the keys had to be in the same format as given in the paper to gain the marks allocated.

3 (a) Few candidates gained full marks for this section. There were a wide variety of inappropriate answers despite this question having appeared on a number of previous papers. If candidates failed to correctly identify the form control then no marks were available for the description.

(b) Many candidates failed to describe Relative and Absolute correctly without drifting into a description of the process known as 'autofill', using terms like 'dragged down'. The examples used were equally poorly described with incorrect syntax references. In many cases the examples given did not relate to the scenario of the paper – many candidates provided examples taken from the 2513 scenario – this strategy failed to gain any marks for the examples. Many responses were not of the quality that should be expected from candidates at this examination level.

(c) This question was generally well answered although a minority of candidates answered giving a list of possible graph types – examiners only marked the 1st answer given.

4 (a) Many candidates simply repeated the question's key word in a variety of formats or gave vague references which failed to gain the marks. Yet again, it was clear which centres had covered this part of the specification and which had not by the range of answers from the candidates.

(b) Many candidates gained full marks for using the terminology within the mark scheme although their description of the sequence of events within the processes often lacked clarity. However, some candidates provided the advantages of using mail merge providing response such as “being able to send lots of letters to lots of people” – this strategy gained no marks.

5 Few students actually answered the question in full. There were very few good responses for this question with many candidates only gaining between 1 and 3 marks. Many candidates described how a stock control system was used rather than answering the question ‘describe the characteristics of ….’ The most common responses included the concept of automatic reordering and stock levels. Many candidates provided responses that included the identification of the features of the system rather than advantages for the business. The examples provided by the candidates in their responses were not in the context of the scenario and so failed to gain any marks.

Many candidates extended their answer outside the allocated space, often writing extended prose which contained a limited number of marking points. Many candidates repeated marking points and few gained the higher marks. Centres need to provide guidance to candidates as to how to answer this type of question correctly as it appears in this format regularly on this examination paper.

2515: Communications Technology and its Application

General Comments

The overall performance of the candidates seems similar to previous examinations. On the whole, most candidates were appropriately prepared for this examination.

The use of requisite language was not always well documented. The technical aspects of the specification were not particularly well known by a significant number of candidates and this gave rise to a disappointing combination, given the title of this paper. The terms clearly appear in the specification and centres should ensure that candidates are familiar with them.

There were a surprising number of candidates who wrote nothing on questions. Additionally, a significant number frequently ignored, or misread, the questions' wording. These approaches are unlikely to gain a pass.

Evidence of having been instructed on the interpretation of keywords was not always to be found in the answers. Given that marks are awarded for how the question is answered, attention should also be given to how the question is constructed.

Centres should remind candidates that it is difficult to award marks when the handwriting is illegible.

Comments on Individual Questions

Question 1

a) Most candidates could describe how voicemail might be used. 'Ringback' caused more problems, with many candidates taking a literal approach without due consideration of any automated procedure.

b) When candidates paused to consider their own use of automated telephone systems, they ably described how the availability of items might be ascertained. However, many gave tangential answers relating to stock control and monitoring systems which did not gain marks. Reading the question carefully would reveal that candidates needed to describe how an identified facility would be used by the subject and not a superficial overview.

c) This was well answered by many candidates who were familiar with these systems. Again, those candidates that considered their own usage were able to eloquently explain the drawbacks.

d) (i) and (ii) Many candidates did not understand that the purpose of encryption is not to stop data being intercepted during transmission, but to make sure it is unintelligible if it is. Too many confused 'coding' and 'encryption'. Equally, many candidates gave an account of how authorisation of credit card transactions takes place rather than giving the purpose of authentication in the context of the question and an example of when this would be used. Examples given for (ii) were often a variation of the example given in (i).

Question 2

a) This was well answered by many candidates who could relate the purpose to the company.

(i) This question saw many vague answers and when candidates did actually mention bandwidth, they tended to relate it to speed rather than capacity.

(ii) Very few candidates could give an accurate description of the drawbacks of ADSL – it was apparent that many knew little or nothing about it. It would seem that it was not in their experience to differentiate between the terms ‘broadband’ and ‘ADSL’.

b) Candidates offered good answers for this question, but many did not understand what ‘features’ were. Accuracy of terms such as ‘drop down list’ and ‘text box’ were rarely seen. Those who did understand the concept of a ‘feature’ sometimes failed to give a sensible example of use from within the given context.

c) It is apparent that most students were unfamiliar with this type of interface and how, or when, it is used.

Question 3

a) It was pleasing to see that the vast majority of candidates were able to identify three applications of satellite technology. Fewer candidates could then expand their answers to describe this usage and gain full marks.

b) The disadvantages of using satellites were well documented in this question, with many candidates scoring three of the available marks. Again, few candidates could then expand their answer in to a description for full marks.

Question 4

a) Pleasingly, very few candidates failed to score anything on this question, with a very high proportion attaining full marks.

b) Given that part (a) caused few problems for the vast majority of candidates, it was surprising that their experiences of 2516 could not be further applied. Too often, candidates confused the elements of the design specification that was being examined with those of the system specification which was not.

c) Candidates either knew the inherent benefits of a user-centred approach or gave vague answers that attempted to display some knowledge of the systems life cycle.

Question 5

a) Quite often, candidates gained full marks. It is hoped that knowledge of the services offered comes from a broad appreciation of what this technology has to offer.

b) Marks were gained for consideration of how a service given in answer to (a) could be an advantage or a limitation. However, candidates tended to repeat the facilities and were unable to expand their answer into a response worthy of any marks.

Question 6

a) Most candidates were familiar with the unique features that can be used for identification purposes and in most cases scored full marks. Very few candidates failed to read this particular question properly and in so doing did not repeat the example given.

b) Almost without exception, the performance of most candidates suggested that they needed more guidance about this type of question and in particular, this key word. Candidates in general produced some salient points, but presented them in a way which did not allow them to access most of the available marks. Too often the limitations that candidates identified did not fully develop into a reasoned explanation that was worthy of any further marks. Reference to each of the points given was scant and those producing lists of perceived limitations gained very few marks.

2516 ICT Projects

General Comments

It is very encouraging to see the quality of the work produced by the candidates being treated properly in the presentation. Most centres are taking on board the advice from previous reports and from Inset that the important thing about presenting the project reports is to help the moderator find the evidence that they need to see. This means not using plastic wallets or appendices as the moderator will not know where to look for the evidence.

For all the reasons rehearsed on these pages in the past can I remind centres that evidence in appendices is not considered by moderators (with the exceptions of the two stand alone guides which a candidate may have named as appendices but which does not change the standing of the piece of work and the letter of acceptance from the client which is strictly not the candidate's work). Thank you to all centres for accepting that appendices should not be used and please continue to encourage candidates to place their evidence properly in the report.

The contents pages are taking hold and many centres are doing this perfectly. Remember that we do not expect the report to be printed with printed page numbers, though many centres are doing this. Hand numbered pages are fine, anything that helps the candidate to point to evidence. Numbered pages also help the candidate in sections like e (i) when the candidate can point to evidence elsewhere in the report to support the assertions that they are making for their work.

The standard still amazes me. The care that many of the candidates put into their work and the results that they get are a testament to the guidance being provided by the staff at most centres. This is a direct quote from last year's report, but it needs to be said so I pasted it in here because so many staff in our centres are working so hard to raise the standard of the work with their students.

There are centres that are having problems in interpreting the criteria in the specification, probably because they are new to the specification but there are two avenues open to teachers in that position. One is the Inset which is offered by OCR. This coming autumn there are courses throughout the country and, particularly if you have not been on one for a couple of years, attendance is encouraged in order to meet with other teachers and discuss best practice which is so important in this particular discipline. The other is to use the OCR coursework consultancy service. Most centres do not need to do this as their expectations are in line with the board, however, when first starting this work the difficult thing is to 'set your sights' at the right level. If two pieces of student work are sent to the board toward the end of the autumn term the moderator is able to assure the centre that they are on the right lines and hence give the teacher confidence in what they are doing and consequently the students.

Please place at the top of the list for this year, to encourage genuine clients and encourage students to collaborate with another person to solve the problem for them. We want a genuine partnership to develop and we want the client to take a genuine part in some of the decision making.

Once again, I voice the hope that candidates get more than just a grade to add to their growing list of achievements in the subject from this exercise. It must be a major part of the lives of some candidates for the six months that they are doing it judging by the results that are produced by some and they should find the experience truly educational.

There follow some points that were at the forefront of the minds of the moderators as they went through the work. I would hope that all teachers would read through these points, however good results were in the centre, as we can all improve.

Specific points

(a) (i) It is pleasing that most reports are giving the required information in a succinct fashion now. The main thing is that we need to be introduced to the client, the person with ownership of the problem to be solved.

(ii) I find that the advice offered last year is still true now. The interviews are poor, the majority being simple questionnaires. To produce a properly thought through interview is an extremely high order skill and the interview in this section is the first of the items which we as assessors can expect to be a major discriminator on grounds of ability. The interview can be considered to carry half the marks for this section and as such a simple set of questions and responses will not score very highly, whereas the candidate who has considered the mechanics of the interview, has planned the questions sensibly, based on what they want to find out, and has considered sensible follow ups dependent on the original answers is working to the full credit. Add to this the ability to analyse the responses so that they inform the rest of the work then we have perfection, which is probably unfair to expect of even the most able 17 year old. Other forms of information collection are perfectly acceptable and must be worth credit, but only if the candidate has justified their use and has analysed the results. Many centres are encouraging the collection of documents that are currently in use in the problem area, this is no bad thing. However, I would expect the candidate to explain why this is being done and also to analyse the documents to extract some important facts that can be used elsewhere in the solution.

Other forms of evidence are useful in the analysis section. A diagram which shows the working of the present system for instance could be very useful; the views of some other people, perhaps those who work in the area of the problem solution. Two things about further evidence: It must not be ‘stand alone’. Too often we see a nice diagram which shows the current position but then it is never used or referred to again, the question must be asked ‘What was the point?’ However, if the diagram is used to identify a weakness in the system then it must be worth credit. The second point is that it must be part of the analysis and not part of the solution. It is accepted that in a genuine piece of work the dividing line between sections a and b will probably be blurred and indeed, should be if the project is not going to become a totally linear solution, but the different evidence needs to be credited in the correct section.

A word about the alternative solutions which should be evident in this section: The intention is that the client/end user should play a full part throughout and this is an obvious place to encourage this collaboration. The candidate, being the computer expert, should be able to describe more than one possible solution. This should be described in layman’s terms so that the descriptions form the basis of a discussion between the candidate and the client leading to a choice of solution that both have played a part in.

Last year I suggested that the analysis section was the weakest section and it is understandable why, the candidate just wants to get on with it. However, it remains the weakest section for many and the one offering most scope for improvement.

(b) (i) I would encourage centres to ensure that the client/end user does not get abandoned here. It is important that the designs are agreed with the user as the work is being created so that the user can have their input to the system solution. This allows the candidate to demonstrate to the reader that the finished product was not a linear process but has been the result of a number of changes before it met with total approval. There is credit to be earned for demonstrating a non linear solution. I wrote last year that validation routines need some attention. They must be planned at this stage, hopefully following on from the user's insistence that certain items of data are crucially important (and so merit special measures when they are input to the system). They will be particularly important later in the work when the candidate is trying to demonstrate on-screen help in the user guide.

(ii) I continue to be amazed that a few candidates are prepared to do 6 months work and cannot think of three good reasons for that work.

(iii) The important thing is to size the files sensibly and then to draw any conclusions from that. This is being done well now. Much of the file sizing is done in b (i) but the moderator can normally find it easily enough (a pointer would be sensible, simply stating the page number). There are far fewer candidates having a wild stab at the file sizes without producing any evidence to support the assertions.

(c) (i) You can almost hear an audible sigh from some candidates that, at last, they are going to be able to produce a solution. What we must not lose sight of is the fact that it is these candidates who are going to get the higher grades because they have done the preparatory work properly. Indeed, many go on to produce some excellent work here and occasionally the assertion that we are going to get in e (ii) that 'I don't know how my business has survived all these years without this software' actually rings true! Most candidates score well, however, by testing the solution in a sensible and thorough way. Remember that the definition of full testing is that all the objectives should be tested enough to provide adequate proof that the objective has been met. To this end the one weakness in the majority of reports is the failure to adequately cross reference everything to the original set of objectives. Again, this last was said in last year's report and it remains the single most important improvement needed in this section.

The un-annotated code which for so long has been a feature of so much work in order to make it look more impressive has largely been disposed of, my thanks for that. For those still encouraging this practice do remember that candidates will be penalised if they include this makeweight because they are demonstrating a failure to understand what is important information and what is not.

(ii) Some centres are still demonstrating weakness here, but most have taken on board what was said in last year's report and the improvement has been marked. Some of the implementation plans have been outstanding but more pleasing has been the overall improvement from most centres. It was encouraging to see the way that advice last year has been followed. I was particularly impressed by: the way so many candidates included the client/user in the decision making; the way that the user(s) had played an obvious part in training and the evidence was presented and the training materials that the better candidates were producing.

(iii) Still a lot of candidates with no diaries (I wrote that last year – still true). Plenty of candidates are coming up with alternatives but there is still no more convincing a means of presenting the problems that have been faced and the order the work was carried out than a simple diary on a single side of A4.

(d) There are a few centres that are awarding full marks without the necessary evidence. The technical manual can only score more than 7 if it goes beyond a simple 'I solved the problems by doing this…' It is expected that for this level of marks a candidate should be able to provide, or at least acknowledge the need for, some adaptive maintenance planning. It is in the theory part of the specification and here seems a really good opportunity to practice this and experience it in real life. The user guide can only be awarded more than 9 marks if there is clear evidence of on-screen help being available to the user of the system. Details have been covered extensively in previous reports and Inset.

(e) (i) The evidence is that most centres are producing excellent work here. The candidates are not only discussing their success or otherwise at achieving their original objectives but are providing evidence to support their assertions. Centres who are failing in this section are normally doing so because the candidate is not providing evidence to support the assertions being made. This is an excellent reason for numbering all the pages of the report because a simple pointer to the page where the evidence can be found is all that is required.

(ii) If anything, the evidence is that this section is getting worse. The following appeared in last year's report and I make no apology for repeating it because I think that it is so important to acknowledge the efforts put in by the candidates over the six months. The client must produce an acceptance letter which looks official (headed notepaper should be used, school headed paper if no other is available). There are exceptions which we have discussed before, but generally speaking the candidate has put in a lot of work and deserves to have their efforts graced by something from the 'real world'. There are a number of examples of pre prepared notes like questionnaires which the user fills in to provide structured evidence of their acceptance but these should be seen as an adjunct to the letter rather than as a replacement.

2517: ICT Systems and Systems Management

General Comments

In general the candidates found the questions accessible, though in some cases they did not read the question carefully and answered off the point.

Some better examples of context related questions were noted this session, though a significant number of candidates failed to grasp that the company mentioned in the questions was a furniture removal company and instead provided answers for a company that sold furniture, which lost marks in some cases.

Too many answers are failing to demonstrate that these candidates are A2 level and often the answers appear unfocussed and unrelated to the number of marks available. Candidates are still missing the distinction between state and explain for instance.

Comments on individual questions.

Question 1(a)(i)
Most candidates failed to score full marks for this question for two reasons. Devices chosen were not always appropriate for a removal company office and when a sensible device was chosen the reason for its use was trivial. For instance a common answer was “A printer to print out documents” which could only score one mark.

Question 1(a)(ii)
Candidates found this question straightforward but often were not disciplined in describing three facilities but instead gave a rambling account of facilities in general.

Question 1(b)
Many candidates failed to notice that equipment was in the question and could not be used as an answer. Although four marks were available many candidates failed to expand on a correct internal resource to gain the extra mark.

Question 2(a)(i)
Generally well answered.

Question 2(a)(ii)
Some candidates were confused over a possible link between this question and 2(a)(i). Most scored some marks but again although four marks were available for two examples, many candidates failed to describe the information. Some chose examples unconnected with the removal firm.

Question 2(b)(i)
Most candidates scored marks here.

Question 2(b)(ii)
A number of candidates incorrectly thought that this personnel processing system would hold details about customers.

Question 3(a)(i)
This was poorly answered. Many candidates still do not grasp what is meant by the characteristics of a system, and many misunderstood the question and wrote about a global positioning system.

Question 3(a)(ii)
In almost all cases the candidates gave answers concerning the advantages of the system and scored no marks. The question asked for the advantages to the company of **using** the system.

Question 3(b)
Generally well answered. Only a handful of candidates appeared not to know what batch and real-time processing systems were. However the ability to explain the differences for seven marks was not often apparent. Some candidates thought it was a discussion and tried to write a conclusion.

Question 3(c)
Many candidates scored highly on this question but a disappointing number had no idea of the roles and responsibilities of a project team and could not name one role.

Question 4(a)
A number of very good answers, though a few candidates did not read the question carefully and compared off-the-shelf with custom-written, thus often not scoring full marks.

Question 4(b)
Generally well answered but some merely named a step in the production without describing the step therefore not gaining marks.

Question 5(a)
The discussion of the management of change was poorly done. Trivial points were raised and often not amplified. This type of question has appeared year after year and candidates are urged to look at past papers and study the mark schemes to see the kind of response required.

Question 5(b)
Most candidates scored three marks. Sadly, a number appeared not to have studied this section.

Question 5(c)
Most candidates scored well here but again the coherence of the answer was lacking and a failure to make answers relevant to the context suggested by the question meant that candidates did not always gain full marks.

Question 5(d)
Poorly answered with most candidates apparently having little idea of the meaning of software standards.

Question 6
In most cases the discussion of ICT developments was disappointingly poor. Those that reached a conclusion often failed to make it convincing, usually just a reiteration of the remarks that had gone before. A number of candidates thought that the driver would use video conferencing while driving, which was not allowed. Many incorrectly thought that a global positioning system would automatically track the van.

Advanced GCE ICT (3838/7838)
June 2007 Assessment Series

Unit Threshold Marks

Unit		Maximum Mark	a	b	c	d	e	u
2512	Raw	90	60	53	46	39	33	0
	UMS	90	72	63	54	45	36	0
2513	Raw	120	102	92	82	73	64	0
	UMS	120	96	84	72	60	48	0
2514	Raw	90	59	51	44	37	30	0
	UMS	90	72	63	54	45	36	0
2515	Raw	90	55	49	44	39	34	0
	UMS	90	72	63	54	45	36	0
2516	Raw	120	98	87	76	65	54	0
	UMS	120	96	84	72	60	48	0
2517	Raw	90	62	56	50	44	39	0
	UMS	90	72	63	54	45	36	0

Specification Aggregation Results

Overall threshold marks in UMS (ie after conversion of raw marks to uniform marks)

	Maximum Mark	A	B	C	D	E	U
3838	300	240	210	180	150	120	0
7838	600	480	420	360	300	240	0

The cumulative percentage of candidates awarded each grade was as follows:

	A	B	C	D	E	U	Total Number of Candidates
3838	5.2	19.1	39.6	64.2	82.9	100.00	4239
7838	6.4	22.6	49.8	76.7	93.6	100.00	2619

For a description of how UMS marks are calculated see;
http://www.ocr.org.uk/exam_system/understand_ums.html

Statistics are correct at the time of publication

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