RECOGNISING ACHIEVEMENT

GCSE

Applied ICT (Double Award)

General Certificate of Secondary Education **1494**

Examiners' Reports

June 2011

1494/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, Diplomas, GCSEs, OCR Nationals, Functional Skills, 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 specifications 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.

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

General Certificate of Secondary Education

Applied ICT (Double Award) (1494)

EXAMINERS' REPORTS

Chief Examiner's Report

The number of candidates entered for all units this year was significantly fewer than in either session of 2010.

4872 ICT Knowledge and Understanding

General Comments

This paper was attempted by candidates from a wide ability range, with a few showing an excellent, detailed understanding of a wide range of issues.

Most candidates gained marks from a range of questions, covering a number of different areas of the specification. Most attempted to answer in complete sentences but there was still a problem with a minority of candidates whose answers could not be read. It is important for Centres to make clear to their candidates that where responses cannot be read by the examiner they cannot be awarded any marks. Additionally, unless the question clearly requires it, a single word is rarely enough to gain a mark. Comments such as easier, faster, more professional are rarely awarded marks.

Although there were some candidates who did not attempt every question there was no evidence that they had insufficient time – they simply left out some of the questions targeted at the highest levels. Candidates working at the lower levels tended to give very brief answers, even to the longer questions, but did sometimes gain at least one mark from these questions. The more able candidates considered a wider range of aspects in more detail, so gaining more marks.

As in previous sessions there was evidence that some candidates had learned answers from previous papers and reproduced these in response to questions on similar topics but placed in a different context. Generally, candidates who considered the context of the questions were able to give better quality answers.

Comments on Individual Questions

Q1 (a) (i)
Almost all candidates successfully labelled parts B to F. Marks were sometimes lost by not appreciating that only part of the second bullet point is italicised.

Q1 (a) (ii)
Most candidates gained 3 mark points. The most common mistake made by candidates was to give the same fairly trivial reason twice. Candidates writing, for example, 'it looks attractive' the first time was condoned but then putting the same comment a second time, was not.

Q1 (b) (i)
Generally well answered. Almost all candidates successfully gained 3 mark points. Candidates were expected to use technical language so those that said the 'line' had been cut or erased were fine but some said that the line had been removed. This is not a description of how Gill had manipulated the image.

Q1 (b) (ii)
There were very few top band candidates and the question proved to be a good discriminator. Almost all candidates stated the need to copy and paste image 1 and then rotate it. Most stated the need to place the copied images on top of each other. Few candidates then grouped those images together. Very few then explained the need to copy/paste/flip the image to get the final result. Almost all candidates failed to give fine details such as rotate by degree/angle or state the precise number of 'copy and pastes'. Many failed to appreciate that essentially the six parts of the image were identical and consequently had been produced from one.

Q2 (a)
Almost all candidates successfully answered both parts of this question.

Q2 (b) (i)
Most candidates were able to state unique/identity.

Q2 (b) (ii)
Most candidates realised that the record was deleted and correctly assumed the person had left the club. Weaker candidates did not understand the reason for the gaps in membership numbers.

Q2 (c) (i)
This is the first time candidates have been asked the purpose of a validation rule. Very few understood completely what the purpose was. Most candidates successfully answered check/data input.

Q2 (c) (ii)
The question was not a test as to whether they could use, for example Microsoft Access but whether there was an understanding of validating data. Few candidates were able to do this. Many candidates reiterated the question without providing an explanation.

Q2 (d)
Candidates lost marks because they did not relate their answers to the club's database. Many had difficulty separating sort from 'search' and finding an alternative word to search. Although questions on database forms and reports have appeared in previous papers, quite a few candidates misunderstood, they wrote about reports as in school reports, similarly many thought forms were paper forms for members to complete.

Q3 (a)
Some candidates thought that a thermometer was an input device, however, almost all candidates could identify the 3 devices. Where candidates failed to do so common responses were keyboard, monitor and printer, presumably thinking of previous papers on input/output devices. Fans do not actually cool the air but candidates who gave this as a response gained the mark.

Q3 (b)
Few gained 6 marks, most gained 3 or 4. Quite a few made it difficult for themselves by saying 'If temperature goes above or below 18 degrees Celsius, air conditioning will be turned on or off'.

Q4 (a) (i)
This question was aimed at the more able candidates, some did very well. Many candidates reiterated the question without providing an explanation.

Q4 (a) (ii)
Almost all candidates successfully answered this question.

Q4 (b)
Most candidates successfully answered this question. The most common mistake was in part (ii) where candidates failed to clearly state the need to click/select P5.

Q4 (c)
Most candidates understood the question and gave reasonable responses. Poor responses stated save rather than copy.

Q5 (a) (i)
Most candidates understood the question and gave reasonable responses.

Q5 (a) (ii)
Most common mistake was to use trade names as example software.

Q5 (b)
Most candidates did well. The most common mistake made was for the DVD drive where many thought that this was an input device.

Q6 (a)
Many candidates did not understand the question. Whilst a benefit was frequently correct the drawbacks were generally wrong. Most candidates gave invalid reasons such as 'unable to use email/email might get lost'.

Q6 (b)
There very few top band candidates and the question proved to be a good discriminator. Fraud was the usual drawback, there very few others. Candidates either gave good detailed comparisons with many examples or merely repeated one/two points.

Q7 (i)
Very few knew the correct answer.

Q7 (ii)
Most candidates were able to identify two features for chairs and one feature for keyboards and screens. Candidates frequently answered a similar question in previous papers and consequently, incorrectly wrote about the effect on the user.

4873 Business Systems Portfolio

General Comments

Centres should note that January 2012 is the final time candidates can be entered for this specification. All candidates working on this specification MUST be entered in October to be accredited in January 2012.

Most work was presented bound with treasury tags in the manner requested in the portfolio administration pack. A few centres presented work as loose pages in document wallets or plastic pockets, which are difficult to handle and not appropriate for moderation.

A significant number of portfolios came with no Centre Name or Candidate Number on the individual URL sheets, this slowed down the moderation process.

Most centres used the Unit Recording Sheets, with many referencing the page numbers where evidence achieving the criteria could be found. This helped with cross-referencing and aided the moderation process. Some Centres provided extra annotation within the coursework portfolios and this was greatly appreciated by the moderating team. Some indication where tutors are allocating marks benefits both the candidate and the moderator. Some centres are still including unnecessary printouts eg multiple copies of data collection forms.

There are still a significant number of arithmetic errors. A number of centres had different marks on the MS1 form from the mark on the URS attached to the candidates work. In a minority of cases, errors were found in the addition of marks on the URS. In some cases centres gave 3 different marks for one candidate.

Before sending MS1 mark sheets to OCR and the moderator it is important to double-check that the mark on the URS has been correctly totalled and that it has been correctly transferred to the MS1. Centres need to ensure that the intended mark is clear on the copy to be sent to the moderator.

Centres are also reminded that where candidates are taught and assessed by more than one teacher, this should be recorded in the 'teaching group' column of the MS1.

There is a requirement for all centres to provide a Centre Authentication Form, CCS160, for both units. Failure to send this form could delay in results being released. Centres are requested to send these forms to the moderator either with the MS1 or with the coursework sample.

Moderators continue to identify centres that would benefit from a more complete understanding of the specification by attendance at OCR training courses.

Business Systems Portfolio

Candidates studied a wide range of organisations, many through case studies. Most candidates produced systems linking database and word processing software. The similarity of solutions from candidates within some centres is a cause for some concern, as the specification requires candidates to design and create their own solutions.

Strand a

The purpose of this strand is to enable candidates to learn about hardware and software by studying its use in real organisations. Best work came from centres carrying out genuine research into real organisations, enabling candidates to learn about specific hardware and software used. A significant number of candidates wrote about what they thought organisations should use, rather than what they do use. Many candidates were awarded high marks for work that merely considered peripheral devices rather than the overall hardware infrastructure of the organisations. Where organisations use a network, this is an important aspect that all candidates should consider.

There is a minimum requirement for one mark, to give at least one use of ICT by each of two organisations, along with the information requirements and the hardware and application software for at least one system.

Strand b

The purpose of this strand is for candidates to comment on standards of layout, presentation and writing styles on the documents they have collected, drawing conclusions in a word processed report. Some centres awarded middle band marks over-generously when candidates had identified audience and purpose but made little or no reference to the content, layout and style of documents studied.

Candidates often scored higher marks where they annotated the documents. There is no requirement in this strand to criticise documents or suggest improvements. The full six marks can be gained where candidates summarise their findings about standards relating to layout, content and style of specific types of documents, including recognition of house style.

Strand c

The purpose of this strand is for candidates to prove they have mastered the use of application software. The quality of documents produced for this strand has improved; although candidates should produce documents of their own rather than copy examples they have been given. There is a requirement for these documents to be fit for purpose and audience, which means they should have very few errors. Documents should be spell checked and proof read to check for errors in content, layout and style.

Business cards or flyers give candidates very little scope to show their mastery of publication software and consequently gain marks only in the lowest band. Candidates should produce, for example, a business report combining text, graphics, charts, photographs etc, and make use of features such as text and graphic frames, columns, headers or footers, text wrap and text flow. A presentation should combine a range of different media effectively and house style implies more than just adding a logo.

Some candidates produce an invoice using spreadsheet software, which does not contribute to marks in this strand. Where candidates fail to meet the basic rubric of producing documents using each of WP, DTP and presentation software no more than two marks can be awarded.

Strand d

A data flow diagram (DFD) shows external entities, processes and data stores, with the flow of data between them. It makes no attempt to show the order of processes. Many candidates are still using the wrong symbols and producing flow charts not DFDs, which do not meet the requirements for marks above the lowest band.

Strand e

The purpose of this strand is for candidates to be specific about what their system will do and what the desired outcomes will be. Consideration of testing strategies is required for middle and upper band marks. Teachers must ensure that, at an early stage, candidates specify a system that is not too challenging for them and that they are capable of completing.

Strand f

The purpose of this strand is for candidates to record the implementation of their system, not a set of instructions for the use of the software. Those scoring high marks used cropped screenshots as part of a coherent report. In order for someone else to re-create their system candidates should provide printouts showing data they have entered. Printed output is necessary evidence that implementation has been completed. If a database is set up there should be sufficient records to enable candidates to show that their system works efficiently. Twenty records should be considered the minimum.

Strand g

The purpose of this strand is for candidates to test and evaluate their system. Candidates gain marks for testing their system using normal, abnormal and extreme inputs. Normal data is within the expected range, extreme data is at the boundaries of the expected range and abnormal data is outside the expected range. For example, if the range is 0 to 100, 20 and 70 would be normal, 0 and 100 would be extreme, whilst -5 or alphabetic data would be abnormal. Some Centres ensured that this was carried out only once irrespective of the needs for testing the system. For marks in the highest band candidates should provide clear evidence of improvements made as a result of testing, and should evaluate their system against user requirements.

Strand h

The purpose of this strand is for candidates to produce a user guide for someone to use the system they have set up. There were some excellent examples of user guides from candidates who used annotated, cropped screen prints to produce 'quick start' guides which would allow a novice to start using the system quickly. High attainment was often aided by use of user-friendly menus or switchboards in database systems. Candidates who went to the trouble of producing a separate A5 booklet, presumably using existing user guides to help them, often fared better.

It is important that candidates cover all of the required points in the exemplification. Their user guide must also cover all areas of their system.

4874 ICT Survey Portfolio

General Comments

Centres should note that January 2012 is the final time candidates can be entered for this specification. All candidates working on this specification MUST be entered in October to be accredited in January 2012.

Most work was presented bound with treasury tags in the manner requested in the portfolio administration pack. A few centres presented work as loose pages in document wallets or plastic pockets, which are difficult to handle and not appropriate for moderation.

A significant number of portfolios came with no Centre Name or Candidate Number on the individual URL sheets, this slowed down the moderation process.

Most centres used the Unit Recording Sheets, with many referencing the page numbers where evidence achieving the criteria could be found. This helped with cross-referencing and aided the moderation process. Some Centres provided extra annotation within the coursework portfolios and this was greatly appreciated by the moderating team. Some indication where tutors are allocating marks benefits both the candidate and the moderator. Some centres are still including unnecessary printouts eg multiple copies of data collection forms.

There are still a significant number of arithmetic errors. A number of centres had different marks on the MS1 form from the mark on the URS attached to the candidates work. In a minority of cases, errors were found in the addition of marks on the URS. In some cases centres gave 3 different marks for one candidate.

Before sending MS1 mark sheets to OCR and the moderator it is important to double-check that the mark on the URS has been correctly totalled and that it has been correctly transferred to the MS1. Centres need to ensure that the intended mark is clear on the copy to be sent to the moderator.

Centres are also reminded that where candidates are taught and assessed by more than one teacher, this should be recorded in the 'teaching group' column of the MS1.

There is a requirement for all centres to provide a Centre Authentication Form, CCS160, for both units. Failure to send this form could delay in results being released. Centres are requested to send these forms to the moderator either with the MS1 or with the coursework sample.

Moderators continue to identify centres that would benefit from a more complete understanding of the specification by attendance at OCR training courses.

ICT Survey Portfolio

The general purpose of this unit is for candidates to use ICT for meaningful research. There was a significant difference in the standard of reports for strands e, f and g, with some candidates producing thorough, well-researched reports whilst others showed little or no evidence research, producing superficial reports, often including much repetition.

The spreadsheet and database should be designed and created by the candidates. The similarity of these elements from candidates in some Centres is a matter of some concern.

Strand a

In this strand candidates must produce a bibliography of sources they use in the entire portfolio. Some Centres approached this as a separate task rather than as evidence of research carried out for the rest of the unit. A significant number of candidates did not list sources used in their research for strands e, f and g.

Candidates should also show how well they can use the Internet as a research tool. Higher band marks were frequently awarded on the strength of evidence that candidates had used the advanced search page option of a search engine, regardless of the quality of criteria entered. Candidates at this level should also provide evidence of cross referencing sources to check for accuracy and bias. There appears to be a misunderstanding as to the meaning of accuracy and bias. Just because information comes from a well know site does not mean that it is not biased and indeed it may also be inaccurate. When listing web sources these should be URLs for the actual pages of useful information rather than for website home pages. Where research is restricted to the Internet, marks can only be awarded in the lowest band.

Strand b

Candidates who achieved well started with clear statements or aims for their survey and this focus allowed them to produce a meaningful report of their findings. Some candidates carried out purposeless searches without arriving at any conclusions from their survey.

Some Centres allowed candidates to split a single data table into two rather than using a true one to many relationship. Others set up related tables but did not make use of related data, and produced queries using only one of their tables. This does not meet the criteria for the higher mark bands.

Centres should note that sorting is a requirement in all mark bands. Evidence of this was often missing.

Strand c

Candidates from many centres produced reports summarising effective analysis of complex spreadsheets, meeting well the requirements for high marks. All candidates need to show printed evidence of the formulas and functions used.

Strand d

Candidates often created good media elements, many using sound or edited digital photographs with a few using video clips they had filmed themselves. Unfortunately some centres gave high marks to candidates who had used a limited range of media and links. Clip art sounds and animations are basic features which do not satisfy the criteria for higher band marks. Additionally, many candidates failed to produce a storyboard or structure diagram showing the variety of routes through their presentation.

Centres are advised to ensure the printouts provided in the portfolios accurately evidence the range of media and interactivity in the presentations. Where this is not the case, teacher witness statements can detail the different elements used.

Strand e

A number of candidates wrote in general terms rather than clearly identifying specific groups or individuals affected by developments in ICT. Bulleted lists or brief sentences in a table structure are unlikely to reach the higher mark bands.

Strand f

Candidates who had obviously specifically addressed this strand often gained higher marks than those who tried to meet the requirements of strands e and f together. Where the needs met by the uses of ICT are not explicitly considered marks are restricted to the lowest mark band. A need is defined as satisfying a basic requirement whilst a benefit is an advantage of meeting these requirements. For example, candidates might write about the communication needs of some groups. Then they will identify some of the advantages of using ICT to meet those particular needs.

Strand g

This strand must be related to specific groups or individuals. For example, in the area of communications those with no access to computers and the Internet will not have the advantages of email – quick and easy communication with friends and relatives. Further explanation that this might result in people becoming more isolated, left out of activities, losing contact with friends over time, etc, is required before middle and higher band marks can be considered.

Some centres gave candidates credit in this strand for negative consequences of the use of ICT, rather than consequences of little or no access.

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