OCR
RECOGNISING ACHIEVEMENT

GCSE

Applied ICT

GCSE **1494**

Report on the Units

January 2008

1494/MS/R/08J

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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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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

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REPORT FOR THE UNIT

Principal Moderators Report

General Comments

With only 25 Centres entering in January 2008, it not possible to give general meaningful comments.

Therefore this Report is intended to help Centres for future entries rather than comment on the January 2008 entry,

All work should be presented and bound with treasury tags in the manner requested. Loose papers in pocket wallets or plastic pockets are not appropriate for moderation.

Annotation

Centres should use the Unit Recording Sheets correctly, referencing the page numbers where evidence achieving the criteria could be found. This helps with cross-referencing and supports the moderation process.

Some Centres give extra annotation within the coursework portfolios, and this is greatly appreciated by the moderating team. Some annotation or indication where tutors are allocating marks benefits both the candidate and the moderator.

Although annotation is not essential, its use is greatly appreciated, aids the moderation teams and is an example of best practice.

Anything that supports teacher assessment and avoids the need for mark adjustments must be a benefit to both the candidate and the moderator.

Arithmetic errors

Centres often make arithmetic errors, Centres often have different marks on the MS1 form (the form sent to OCR to record candidates marks, and the form used by moderators to select their sample), from the mark on the URS attached to the candidates work.

In some cases Centres often give us 3 different marks for one candidate. This must be addressed for the next examination period.

Before sending your coursework sample to moderators it is important to double-check that the mark on the MS1 is the same as the mark allocated to the candidate on the URS of the coursework portfolios.

MS1s

When completing the MS1 forms, Centres need to ensure that the intended mark is clear on the copy to be sent to the moderator.

Centres often write on the MS1 while resting on other pages, making the whole MS1 impossible to read, or they had not put sufficient pressure on to ensure the bottom copy was legible.

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

Centre Authentication Form (CCS160)

This is now required from all Centres. Failure to send this form could delay in results being released.

Please send these forms to your moderator either with the MS1 or with the coursework sample.

Allocation of Appropriate Time

Anecdotal evidence suggests that some Centres are still delivering this course in less than the recommended minimum of four hours per week. Whilst it may be possible to teach the theory elements in less time, candidates will not master the use of application software sufficiently to access the higher mark levels.

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

4872 ICT Knowledge and Understanding

General Comments

Most candidates attempted all questions and it was pleasing to see that the majority took note of the instruction to ensure all answers were kept within the space provided.

As in previous sessions a number of candidates lost marks by giving over-brief and general answers, which were simply too vague. The words 'quicker', 'easier', efficient', professional', 'cheaper' etc on their own are not sufficient to gain marks on any question.

Other candidates lost marks by referring to software and hardware by brand names rather than the correct technical term.

Each session's paper is set in the context of a different fictional business and all questions relate to that business. There was evidence in some questions of candidates repeating learned answers from similar questions on previous papers, which were not relevant to this paper's context.

In a small number of papers it was extremely difficult to read what the candidates had written.

Comments on Individual Questions

Q No)

1 **(a)** Although most candidates answered this question well, some confused right- with left justification. A significant number circled only the bullets themselves, as required by a question on the last session's paper, rather than the complete bulleted list, as required here.

(b) Again this question was well answered by many candidates, but a significant number failed to gain the full four available marks. Some failed to give a feature, simply giving the text affected, whilst others gave software features that did not involve formatting text to make it stand out. Common incorrect answers were WordArt and left justification, a default setting.

(c) Most candidates were able to gain one or two of the four available marks for part (i) of this question but few were able to describe the process in sufficient detail for full marks. Many failed to consider how the second graphic was obtained and flipped. Part (ii) asked candidates to give advantages of using clip art and a large number of answers were simply too vague or failed to distinguish between clip art and other methods. Most candidates were able to suggest an alternative source of graphics for part (iii), with obtaining images from the Internet being the most common answer. Advantages were less well considered, with many over-vague answers. Many candidates appear to think that clip art consists only of cartoon drawings.

2 **(a)** Although many candidates were able to correctly suggest a spreadsheet, a large number gave the answer as a database, whilst a significant number failed to gain a mark because they only gave a brand name.

(b) Many candidates were able to gain one mark for knowing that a spreadsheet is able to carry out calculations using formulas. Other suggestions were often too trivial or generic, failing to distinguish between a spreadsheet and other types of application software. The ability to recalculate/update as a result of changes was the answer that most commonly gained the second mark.

(c) Many candidates gained both marks for (i) by giving the correct answer of =C4-D4. As in previous years, a significant number seem to think that SUM is necessary on all formulas, whilst others wrote answers that resembled mathematical equations rather than spreadsheet formulas. If the answer would not work when entered into the identified spreadsheet cell no marks were awarded.

Although most candidates were able to gain one or two marks in (ii) for knowing that there is an automatic way to replicate formulas, most answers were too general to gain full marks, failing to refer to specific cells.

Part (iii) was very poorly answered, showing that few candidates have a real understanding of relative/absolute cell referencing. This despite the fact that the previous part of the question should have prompted them to think about copying the formula down the column. Some candidates tried to guess an answer from their understanding of the English word 'relative', whilst most wrote about the value in the cell automatically updating to reflect changes in C4 and/or D4.

(d) This was well answered by most candidates, although a significant number failed to identify F12 as a cell that would change as a result of a change in D7. A small number of candidates demonstrated no understanding of spreadsheet cells and wrote about chocolate bars.

(e) Many candidates missed the point of this challenging question and wrote about creating a report in a database. A number of candidates gained up to three marks by suggesting they would need to create some sort of summary sheet, charts and/or a written report using a word processor, but it was rare to find a well-thought-through answer that was specific about what would be needed.

3 **(a)** Most candidates gained at least one mark for this question. However, a large number of candidates failed to appreciate the ease with which unprotected electronic data can be lost or seen by unauthorised people. A number of answers suggested simply that electronic data 'can be edited' without showing any appreciation of what can be done with paper records. A significant number suggested that it would be quicker to create electronic records rather than writing them.

(b) Although the majority of candidates knew that validation is a check on input data, very few gained all three marks. It was common to see answers suggesting that validation prevents *all* mistakes. Some knew that there was such a thing as a validation rule but showed little understanding of what this meant.

(c) Many candidates had learned some of the requirements of the Data Protection Act and were able to gain an easy 3 marks for this question. Other candidates gave vague answers about protecting data but showed little understanding of the requirements of the Act.

(d) This question was very poorly answered. Many candidates who had learned the requirements of the Data Protection Act merely repeated their answers to part (c). Other candidates mistakenly wrote about copyright, hacking, viruses, identity theft or fraud.

4 **(a)** This question was generally well answered, although a number of candidates appear to think that hardware is just the peripheral devices.

(b) Most candidates were able to correctly identify the different types of device, although a significant number incorrectly identified RAM as a processing device. Another device commonly identified incorrectly was the scanner.

(c) This question was well answered by most candidates, although some failed to differentiate between a usb port and a usb mass storage device.

5 **(a)** Although almost all candidates recognised the World Wide Web as a collection of information, a large proportion thought that the term was synonymous with the Internet.

(b) This question was not answered well. Many candidates gave very vague answers such as 'extra advertising' whilst others suggested that a worldwide audience would be beneficial to a local sandwich company. Few appeared to recognise the fact that having a website does not guarantee a lot of hits. Suggestions that a website would make the company seem 'more professional' were considered too vague to be worthy of a mark.

(c) Whilst most candidates appreciated the need for an internet connection many failed to consider specific items that would be needed to accomplish this.

(d) Most candidates gained one mark from this question by acknowledging that some people do not have Internet access. The second mark was usually achieved through an understanding of the needs of a local company and the fact that websites are not automatically seen by the target audience.

(e) This question was well answered by many candidates. A number failed to distinguish between the home page and the website in general in part (i). In part (ii) a number of candidates simply gave items of text and/or graphics.

6 **(a)** Few candidates gained high marks for this question. Some failed to appreciate the fact that the question asked them to compare the two alternatives. Many candidates made one or two valid points and then repeated these rather than explaining them or considering other points. There was some confusion about the capabilities of the two devices, with many answers suggesting that a pda is basically an electronic diary, with no appreciation of the fact that diary software can be used on a laptop or that other software can be used on a PDA.

(b) Most candidates appreciated the fact that price comparison websites allow cheaper options to be found. However, although a wide range of valid answers were found overall, few candidates gave sufficient reasons to gain full marks for this question.

7 **(a)** The majority of candidates gained at least one or two marks for this question, clearly understanding what a backup is. Some failed to distinguish between backing up and saving, whilst others appeared to think that the purpose of a backup is to transport data from one computer to another. As in previous sessions a number of candidates wrote that a backup is required in case the computer crashes.

(b) Most candidates were able to suggest two appropriate devices, although some gave over-vague answers such as 'usb'. It was surprising how many candidates suggested floppy disk drives, which, although acceptable as an answer, are no longer commonly used.

(c) This question was not answered well. Candidates often wrote vague statements which, whilst not incorrect, failed to give the advantages of any one device in comparison with the other two. For example, it was common to find all three devices attributed the advantage of 'stores a lot of data'. Many candidates failed to consider their answers in the context of backups rather than portability, with many commenting on the ease with which usb flash memory devices can be carried around. Better candidates were able to compare the three devices accurately and explain why the different properties were either advantages or disadvantages.

(d) A number of candidates misunderstood this question and continued to write about the choice of medium rather than where to store it. Many answers were too vague, such as 'a safe place' whilst others were rather trivial such as 'a place you won't forget'. However, a significant number did show an understanding that backup media should be stored away from the main computer in a place that is secure from theft and protected from physical damage.

4873 Business Systems Portfolio

Candidates should study a wide range of organisations.

Quite often too many systems are too similar, and that sometimes gives the impression of Centre led and designed tasks.

Strand a
The purpose of this strand is to enable candidates to learn about hardware and software by studying its use in real organisations. A significant number of candidates wrote about what they thought organisations ***should*** use, rather than what they ***do*** use.

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. Candidates are not covering the use of hardware and software as well as in previous sessions. In particular candidates are not recognising the significance of networks in meeting the needs of the organisations.

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.

It was pleasing to see a more appropriate range of documents such as letters, reports and websites, reviewed by candidates. Candidates often scored higher marks where they annotated the documents.

Strand c
The purpose of this strand is for candidates to prove they have mastered the use of application software sufficiently. 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..

Business cards or flyers give candidates very little scope to show their mastery of publication software and deserve 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.

Strand d
The purpose of this strand is for candidates to show they understand what a Data Flow Diagram is. A Data Flow Diagram shows external entities, processes and data stores, with the flow of data between them, too many candidates are just using flow charts.

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. 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. 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 prints of the 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 against 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 are abnormal. For marks in the highest band candidates should evaluate their system, suggesting improvements they might make.

Strand h
The purpose of this strand is for candidates to produce a "User Guide" for someone to ***use*** their system. Candidates who use annotated, cropped screen prints to produce 'quick start' guides which would allow a novice to start using the system quickly gained the highest marks. High attainment was often aided by use of user-friendly menus or switchboards in database systems.

4874 ICT Survey Portfolio

The general purpose of this unit is for candidates to use ICT for meaningful research.

Centres still treat each strand as a separate entity. Reports for strands e, f and g often fail to show evidence of in depth research, treating the subject in a very superficial manner.

Centres should try to encourage individuality amongst candidates.

Strand a
In this strand candidates must produce a bibliography of sources they use in the entire portfolio. A significant number of candidates do 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. They should show that they can research available technologies, can refine those searches, mark pages for later return, and produce meaningful results which they have cross referenced for accuracy and bias. When listing web sources these should be url's for the actual pages of useful information rather than for website home pages.

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 is not meeting the criteria for the higher mark band.

Strand c
Candidates need to show printed evidence of use of formulas and functions. Some candidates used spreadsheets merely as a tool to produce charts, whilst others merited high marks by producing coherent reports combining sections of their data tables with charts and a commentary analysing survey results.

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.

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
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 advantages of using email as a form of communication. Then they will identify some of the advantages of using email for that purposes. Too many candidates identified and described advantages and disadvantages rather than benefits and needs. Whilst benefits may tie in with advantages needs do not match disadvantages.

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.

Grade Thresholds

General Certificate of Secondary Education
Applied ICT (Specification Code 1494)
January 2008 Examination Series

Unit Threshold Marks

Unit		Maximum Mark	A*	A	B	C	D	E	F	G	U
4872	Raw	100	81	72	63	55	47	39	32	25	0
	UMS	50	45	40	35	30	25	20	15	10	0
4873	Raw	50	47	42	37	32	27	22	17	12	0
	UMS	50	45	40	35	30	25	20	15	10	0
4874	Raw	50	47	42	37	32	27	22	17	12	0
	UMS	50	45	40	35	30	25	20	15	10	0

Specification Aggregation Results

Overall threshold marks in UMS (i.e. after conversion of raw marks to uniform marks)

	Maximum Mark	A* A*	AA	BB	CC	DD	EE	FF	GG	UU
Raw	300	270	240	210	180	150	120	90	60	0

	Maximum Mark	A* A*	AA	BB	CC	DD	EE	FF	GG	UU
UMS	100	90	80	70	60	50	40	30	20	0

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

	A* A*	AA	BB	CC	DD	EE	FF	GG	UU	Total No. of Cands
Cum %	0.0	3.6	21.6	67.5	93.3	97.4	99.5	100.0	100.0	215

215 candidates were entered for aggregation this series

For a description of how UMS marks are calculated see:
http://www.ocr.org.uk/learners/ums_results.html

Statistics are correct at the time of publication.

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

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