OCR
RECOGNISING ACHIEVEMENT

GCSE

Applied ICT

GCSE **1494**

Report on the Units

June 2008

1494/MS/R/08

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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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Chief Examiner's Report

Although the number of candidates entered for this session was considerably lower than last year there was evidence of achievement across the entire grade range. It was pleasing to see some very good work in all units but the number of Centres where portfolio marks had to be scaled because of incorrect interpretation of the specification requirements remains a cause for concern. A programme of training for teachers is offered for this specification and Centres are encouraged to make use of this opportunity.

Centres are reminded that there is a recommended minimum time allocation for this specification of four hours per week. Whilst the exact time requirement will depend upon candidates' understanding and skills upon starting the course, Centres should not expect good results if candidates are not given sufficient time to cover the requirements of the written examination and to meet the extensive portfolio requirements.

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 (Written Examination)

General Comments

As in previous sessions most candidates made an attempt at all questions, with a wide range of marks evidenced. In some questions aimed at the higher levels, eg 5f(ii) and 10c, candidates failed to give sufficient detail.

Centres are recommended to impress upon candidates that most questions require more than a single word, which is invariably too vague to be credited with a mark.

Comments on Individual Questions

1) (a-c) Whilst parts a and b were generally well answered, a small number of candidates gave DVD writer as either an input or an output device. Many candidates gained 1 mark for part c, where hard disk drive was the most common correct response and RAM the most common incorrect response

(d) Most candidates were able to identify RAM as the correct item, although a significant number chose processor. Although many were able to say that RAM was a temporary storage device, few were able to show any understanding by answering the question about what that temporary storage is needed for. Other candidates wrote about volatility, which again did not answer the question about purpose. A number of candidates thought that the purpose of RAM was to speed up the computer.

(e) Most candidates correctly identified the processor, although some confused it with RAM, but few were able to gain the second mark for specifying a function of the processor other than 'to process data'.

2) (a) Some candidates confused networks with the internet. Most, however, gained at least two marks for computers being linked and for the ability to share data and/or peripheral devices.

(b) Very few candidates obtained all three marks. Network card and cables were the most common correct answers but many candidates gave answers relating to internet connections.

(c) The majority of candidates gained one mark for this question but many answers concentrated on security, demonstrating a lack of understanding of the different roles of user name and password. Although being a unique identifier and allowing access to a personalised area were the most common correct responses a significant number wrote about monitoring network activity, perhaps reflecting practices in their own Centre.

(d) Most candidates were able to gain full marks for (i), showing a good understanding of features that make a good password. However, although the majority of candidates were able to gain a mark in (ii) for knowing that the password is entered twice to detect/prevent errors few expanded their answer to gain the second mark. Some candidates thought that the reason was to make sure that the person would remember it or for security purposes.

3) (a) This question was generally well answered, although as in previous sessions a significant number of candidates gave only a trade name, which is insufficient for the mark. Some candidates suggested that presentation software would be used to produce a catalogue.

(b) This question was answered poorly by many candidates. Some gave one-word answers that were insufficient to unambiguously evidence an understanding of DTP features. Others gave general features that could equally well be found in a word processing package. The most common correct answers were the availability of ready-made templates specifically for catalogues and the fact that text and graphics can be moved around more easily/accurately.

(c) Many candidates were able to give the correct answers of digital camera and scanner but few were able to give advantages for either of these, with answers tending to simply describe how images are transferred to the computer. Many candidates wrote about storage devices and gained no marks.

(d) A minority of candidates demonstrated an understanding of the use of graphics software and gained three marks. However, the majority of candidates suggested features such as crop, rotate and resize that do not edit the image and are equally available on word processing and DTP software. Where candidates gained only one mark this was often for knowing about red eye removal tools.

(e) Many candidates gained full marks for this question. However, a number of candidates failed to read the question in (i) thoroughly and wrote about copyright of photographs that Deepak might have taken himself.

4) (a) The majority of candidates gained the mark for knowing that the legislation is about health and safety, although few knew the precise name of the Act. A significant number thought that it was the Computer Misuse Act.

(b) Candidates demonstrated a good understanding of health problems and prevention methods, with many gaining the full six marks. Some candidates lost marks by repeating answers or by giving answers that were too vague.

5) (a-b) These questions were generally very well answered, with few candidates getting them the wrong way around. However, some counted the column headings and suggested that there were six records, with 40 and 45 being the most common incorrect answers for both questions.

(c) Although many candidates gained one mark for showing an understanding that the Supplier ID is used to find/identify the supplier few went beyond this fact. Despite this type of question being answered well in previous sessions few candidates were able to identify it as a key field.

(d) This question was generally answered very poorly. Although many candidates recognised the need for a query, very few realised that both searching and sorting would be required and few were able to give the correct search criterion. The most common incorrect response was to suggest a search for country = Kenya.

(e) Despite the fact that most candidates create database reports in their portfolio work, only a minority showed an understanding of what a database report is with very few being able to suggest why it is used. Many knew that the report shows the results of a query, but often did not show any understanding of the difference between running a report and running a query.

(f) A small minority of candidates were able to demonstrate a good understanding of relational database structure in (i). However, most candidates gained no marks for this part of the question, with many answers suggesting that the data was not needed, or that it would just make the database 'too confusing'.
Most candidates gained either full or zero marks for (ii). The most common correct answers were a customer table and a product table but many candidates gave fields or described queries.
Although most candidates gained a mark in (iii) for knowing that the tables needed to be linked, very few gave any more detailed thought to the links that would be required. A number of candidates suggested merging the tables into one.

(g) This question was generally very poorly answered, with few candidates showing any understanding of why forms are used. A number thought that only by using forms could validation, input masks or drop-down menus be used. Others wrote in general terms about forms making data entry 'easier' or 'quicker' without considering why.

6) (a) This question was answered well, with the majority of candidates gaining full marks. Some failed to circle the bulleted *list* whilst some were unable to identify the complete footer.

(b) This question was generally answered well with spell check and proof reading being the most common answers. A number of candidates answered Print preview without explaining what they would then do to check the document.

7) (a) This question was generally answered well, although a significant number of candidates failed to show an understanding of the difference between work held in RAM and work that is saved. A number simply suggested 'hackers' without explaining what they would do, whilst others suggested that hackers stealing data might cause this problem.

(b) This question was answered very well by the majority of candidates with back up and anti-virus software the most common correct responses, often well explained.

8) This question elicited a wide range of responses, with candidates gaining the whole range of marks from 0 to 8. Many gave very general answers without referring to any particular development or device whilst others listed devices and developments without considering any ways in which these might be used by Fair For All staff. The question clearly asked for ways in which staff who have to travel to different countries might use technology, so answers suggesting that the use of email and video conferencing would allow them to stay in the UK did not answer the question.

9) This question was answered very well by the majority of candidates, who were able to show a good understanding of the roles of the computer and the sensors. However, a number of candidates suggested that a worker would switch output devices on and off, whilst a significant number gave scanner as the device that would pass data to the computer.

10) (a-b) These questions were generally well answered although some candidates suggested B7 for (a) and, in fewer cases, B2 for (b).

(c) Whilst the majority of candidates recognised the need for a formula, a significant number failed to give sufficient detail for a mark. Many candidates were able to gain one mark for showing that the formula would be placed in B10 or for showing some understanding of the IF formula required, but very few gave more detailed answers that were worthy of more than one mark.

Principal Moderator's Report

General Comments

Most work was presented bound with treasury tags in the manner requested. Loose papers in pocket wallets or plastic pockets are not appropriate for moderation.

Annotation

Most Centres used the Unit Recording Sheets correctly, completing the teacher comment section and referencing the page numbers where evidence meeting the criteria could be found. This aided the moderation process.

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

Arithmetic errors

As in previous sessions a significant number of arithmetic errors were found. A number of Centres had 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 candidate's work.

In a minority of cases, errors were found in the addition of marks on the URS.

Before sending the MS1 form to OCR and your moderator 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 had often written on the MS1 while resting on other pages, making the whole MS1 impossible to read, or they had not used sufficient pressure to ensure the moderator 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 for each unit. Failure to send in this form could cause a delay in results being released.

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

4873: Business Systems Portfolio

It is a cause for concern that the systems produced by candidates from some Centres are too similar to each other, giving 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 often write in very general terms, failing to cover the use of hardware and software. In particular many candidates do not recognise the significance of networks in meeting the needs of the organisations, often writing only in a simplistic way about peripheral devices.

Strand b
The purpose of this strand is for candidates to learn about the standards required in professional business documents. To achieve this they should comment on standards of layout, presentation and writing styles on the documents they have collected, drawing conclusions in a word processed report. Candidates often gain higher marks where they annotate the documents.

Strand c
The purpose of this strand is for candidates to demonstrate their mastery of applications software and their understanding of document standards from Strand b. 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 and should use a standard font size and style. Documents should be spell checked and proof read.

Business cards and 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 and 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
A Data Flow Diagram should show external entities, processes and data stores, with the flow of data between them. Unfortunately, many candidates produced simple flow charts, which do not meet this requirement and can only be awarded marks in the lowest mark 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. Teachers must make sure that, at this 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 to give instructions on 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 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.

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, 200 or alphabetic data would be abnormal. For marks in the highest band candidates should evaluate their system against user requirements as well as demonstrating some improvements made as a result of testing.

Strand h
The purpose of this strand is for candidates to produce a 'User Guide' for someone to ***use*** the system they have created. 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 is 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.

Many 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, which limits marks to the lowest band. 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 urls for the actual pages of useful information rather than for website home pages.

Strand b
Candidates who achieve well start with clear hypotheses or aims for their survey, and this focus allows them to produce a meaningful report of their findings. Some candidates carry out purposeless searches without arriving at any conclusions from their survey.

There continues to be some confusion about multiple tables, with some Centres allowing candidates to split a single data table into two, rather than using a true one-to-many relationship. Others set up related tables but do not make use of related data, producing 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. Without evidence of the formulas it is not possible to assess the complexity of the spreadsheet, limiting marks to the lowest band. High marks can be gained by producing a coherent report combining sections of data tables with charts and a commentary analysing survey results.

Strand d
Candidates often create good media elements, many using sound or edited digital photographs with a few using video clips they had filmed themselves. It is important that there is clear evidence of the range of media types used, and of the creation and editing of any components. Clip art sounds and animations are basic features which do not satisfy the criteria for higher band marks.

Strand e
Marks above the lowest band in this strand can only be gained where candidates clearly identify specific groups or individuals affected by developments in ICT. Bulleted lists or brief sentences in a table structure are unlikely to encourage the explanations required by 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 need for communication for a particular purpose. They can then identify some of the advantages of using email for that purpose. Simply identifying and describing advantages without specifically considering the needs met limits marks to the lowest band.

Strand g
This strand concerns the consequences of limited or no access to ICT, and is commonly misinterpreted as disadvantages.

Grade Thresholds

General Certificate of Secondary Education
Applied ICT (Double Award) 1494
June 2008 Assessment Series

Unit Threshold Marks

Unit		Maximum Mark	A*	A	B	C	D	E	F	G	U
4872	Raw	100	80	73	66	59	51	44	37	30	0
	UMS	100	90	80	70	60	50	40	30	20	0
4873	Raw	50	47	42	37	32	27	22	17	12	0
	UMS	100	90	80	70	60	50	40	30	20	0
4874	Raw	50	47	42	37	32	27	22	17	12	0
	UMS	100	90	80	70	60	50	40	30	20	0

Entry Information

Unit	Total Entry
4872	2536
4873	2613
4874	3137

Specification Aggregation Results

GRADE	A*A*	AA	BB	CC	DD	EE	FF	GG	UU
UMS	270	240	210	180	150	120	90	60	0
Cum %	0.9	6.5	23.4	48.6	67.7	79.5	88.2	95.2	100

3218 candidates were entered for aggregation this series

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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