

Report on the Units

January 2009

1494/MS/R/09J

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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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Applied GCSE ICT (1494)

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Chief Examiner's Report

The number of candidates entered for all units this year was significantly lower than in either session of 2008.

Anecdotal evidence suggests that some Centres are still delivering this course in less than the recommended minimum of four hours per week. Candidates are unlikely to gain a good understanding of the subject and master the use of application software sufficiently to access the higher mark levels if time is restricted.

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

Principal Moderator's Report

General Comments

With only 6 centres entering in January 2009, it not possible to give valid summary comments on the portfolios seen. Therefore this Report is intended to help centres for future entries rather than comment on the January 2009 entry,

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

Annotation

It is important that centres use the Unit Recording Sheets correctly, providing page numbers where evidence achieving the criteria can be found.

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.

Arithmetic errors

It is not uncommon to find errors on the MS1 form (the form sent to OCR to record candidates' marks and used by moderators to select their sample). These are often a result incorrectly transcribing the mark from the URS attached to the candidate's work. In some cases errors are found in the addition of marks on the URS.

Before sending the MS1 form to OCR and the moderator it is important for centres to double check the total mark on the URS of the coursework portfolios and that this has been correctly transcribed onto the MS1.

MS1 Forms

When completing the MS1 forms, centres need to check that the intended mark is clear on the copy to be sent to the moderator. As the form comprises NCR sheets if centres write on the MS1 while resting on other pages the lower sheets will be rendered impossible to read. If insufficient pressure is used the bottom copy may not be 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)

One CCS160 form is required from all centres for each unit. Failure to send these could delay the release of results to centres.

Centres should send these forms to the moderator either with the MS1 or with the coursework sample.

4872: ICT Knowledge and Understanding (Written Examination)

General Comments

The number of candidates this session was very small, making any statistical comparisons with previous sessions of doubtful value.

Most candidates performed less well than those in previous sessions. A significant number of candidates appeared to have learned responses to questions from previous papers but were unable to demonstrate their understanding by applying their knowledge to new scenarios and questions which, although about similar topics, were not the same.

Question 4 was particularly poorly answered, with few candidates demonstrating any real understanding of database structure and use, despite the fact that many will have created databases for each of the portfolio units.

Comments on Individual Questions

Q No)

- 1) (a) Candidates were generally able to identify the italic text. Most also correctly identified the fully justified paragraphs and bulleted list, although some ringed only the bullets or a single bulleted item. Only a minority gained full marks on this question, with many unable to distinguish between text as a graphic and a graphic font.

Some candidates failed to follow the instruction to ring the identified areas.
- (b) Although this question was generally answered well, many candidates failed to read the question carefully and repeated points already mentioned in (a).
- 2) (a) Part (i) of this question was generally answered well and most candidates also gained marks in (ii) although few gained the full 5 marks available here, as most considered only one advantage of each method.
- (b) As in previous sessions many candidates failed to gain this mark because they responded with a brand name rather than a generic type of software.
- 3) (a) Although most candidates gained high marks for this question only a minority were able to correctly identify all eight items to gain full marks. Many showed a lack of understanding of backing storage and internal storage whilst a small number showed little understanding of the different types of component.
- (b) Both parts of this question were well answered by the majority of candidates. However, some appeared to be unable to distinguish between a USB port and a USB memory stick.

Report on the Units taken in January 2009

- (c) The majority of candidates were able to demonstrate an understanding of a network and its advantages although, as in previous sessions, a significant number demonstrated confusion between a network and the internet.
- A number of candidates gained only one mark in (i) because they either described a network or a local area but not both.
- (d) Although most candidates were able to identify a potential health risk of using computers in part (ii) few showed a good understanding in part (i) of why computer users are at risk of RSI. Many simply suggested it was a result of not taking breaks whilst others wrote about other types of health risk.
- 4) (a) Responses to this question showed a general lack of understanding of the purpose of related tables in a database structure. Whilst a small number of candidates were able to write about one-to-many relationships the majority of answers simply suggested that there would be 'too many' fields or that the use of different tables would make the database 'more organised' or 'easier to look up'. This lack of understanding might be linked to problems in strand b of Unit 4874, where many candidates create two tables that are in a simple 1:1 relationship.
- (b) Candidates' responses to this question were very disappointing, in contrast to the response to similar questions in the past. The majority suggested a numeric field.
- (c) Few candidates were able to identify in (i) the fact that the changing nature of a person's age makes it an inappropriate entry into a database. Most answers simply considered privacy issues and suggested that age is not necessary, despite the wording of the question. Given this lack of understanding it was surprising to note that many candidates were still able to suggest in (ii) that the date of birth would be more appropriate. This may be a reflection of the fact that candidates have seen date of birth as a field in databases but might not have understood the reason for its inclusion.
- (d) Consistent with part (a) this question showed that candidates have a poor understanding of relationships. Many suggested fields rather than tables whilst others wrote about lists and/or information that would be produced about a particular holiday.
- (e) In contrast to similar questions in previous years the response to this question was poor, with few candidates attempting to give any details about search criteria or output fields. Many candidates who did attempt to be specific merely repeated the wording of the question rather than suggesting specific criteria, including the field and the required value. Some candidates suggested creating a new table by typing in the required details.
- (f) A significant number of candidates were unable to answer this question in the context of a database, suggesting various other types of software to use. Others were able to recognise the need for a query and/or a report but very few gave the detail required for more than two marks.
- 5) (a) This question was generally well answered.
- (b) Candidates generally answered this question well although a significant number had at least one error in part (ii), with B7, B8, B9 and B13 being common incorrect answers. A small number of candidates suggested cells from column A.

- (c) Few candidates gained both marks for this question although many were able to give a partially correct answer and gain one mark. Many suggested multiplying B13 by 7, which would have worked for the data shown but would have failed for any holiday of a different length and showed little understanding of the purpose of a formula.
 - (d) Most candidates were able to gain some marks for this question but few gained the full six available marks. A significant number of candidates suggested items that were not formatting, eg the insertion of blank lines, whilst many candidates failed to consider carefully enough the reasons given, with many vague/incorrect answers such as boldening 'makes the titles easier to read' or currency settings 'because it is currency'.
 - (e) Most candidates were able to gain at least one mark for this question, with most showing an understanding of the fact that formulas are automatically updated when data is changed. However, as in previous sessions, many candidates wrote about spreadsheets being 'more accurate' than calculators and there were a number of answers suggesting that it would be 'easier', 'quicker' or 'more efficient' to use a spreadsheet, without any attempt to explain why. Many candidates mentioned the use of formulas but failed to give any way in which they benefit the user.
- 6)
- (a) Although many candidates were able to successfully identify different methods of accessing the internet a significant number merely suggested items such as a laptop or PDA without considering internet access. These candidates then generally went on to compare a laptop and a PDA, perhaps remembering questions from previous sessions. Those candidates who gave two acceptable answers for (i) generally gained one or two marks for (ii) although few were able to consider sufficient aspects to be awarded full marks.
 - (b) Most candidates were able to gain a number of marks for this question, with some giving well-considered answers earning the full eight marks. High marks were most easily obtained where candidates explained each of their suggestions rather than attempting a simple list of uses. Some suggestions, eg booking flight tickets, were inappropriate for a coach driver.
- 7)
- (a) Answers to this question generally showed a sound understanding of ways in which saved data can be lost, with many candidates gaining the full six marks. However, a significant number of candidates, as in previous sessions, were unable to distinguish between saved data and data that is held only in RAM.
 - (b) This question was generally well answered with a range of acceptable responses. Some candidates wrote about saving data on portable storage media without any suggestion that this would be a copy, hence failing to gain the mark for backups.
 - (c) Most candidates wrote at length about the provisions of the Data Protection Act without answering the question. Many candidates were able to gain one mark by showing an understanding that the purpose of the Act is to protect personal data, but few were able to explain why the increasing use of computers made it necessary.

4873: Business Systems Portfolio

Quite often the systems produced by candidates are very similar, 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 write about what they think 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 instead in a simplistic way about peripheral devices. This lack of detail and understanding of complete systems limits marks to the lowest band.

Strand b

The purpose of this strand is for candidates to learn about the standards required in professional business documents. To achieve full marks 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 produce 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 demonstrate that they have tested and evaluated their system. Marks above the lowest band require candidates to demonstrate that they have tested 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.

Centres should not treat each strand as a separate entity – the research carried out in strand a should support the rest of the portfolio and the bibliography needs to cover all research carried out for all the strands.

Reports for strands e, f and g often fail to show evidence of in-depth research, treating the subject in a very superficial manner.

As in Unit 4873, the spreadsheets and databases created by many candidates are often very similar. Centres should try to encourage individuality and avoid over-direction of 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 bands.

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 have 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 (Specification Code 1494)
January 2009 Examination Series

Unit Threshold Marks

Unit		Maximum Mark	A*	A	B	C	D	E	F	G	U
4872	Raw	100	69	60	51	43	36	29	23	17	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

Specification Aggregation Results

	A* A*	AA	BB	CC	DD	EE	FF	GG	UU	Total No. of Cands
UMS	270	240	210	180	150	120	90	60	0	
Cum %	0.0	0.0	18.5	44.4	66.7	81.5	96.3	100.0	100.0	27

27 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.

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