GCSE

Information & Communication Technology B

General Certificate of Secondary Education **GCSE 1995**

General Certificate of Secondary Education (Short Course) **GCSE 1095**

Reports on the Units

January 2010

1995/1095/R/10J

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GCSE Information and Communication Technology B (1995)

GCSE Information and Communication Technology B (Short Course) 1095)

REPORTS ON THE UNITS

2378 Coursework

General Comments

Candidates following this course were guided to submit coursework based on the use of ICT and the Environment, in line with the guidance provided at INSET.

Most Centres had taken more notice of the 2nd paragraph of 7.1, Marking Criteria for Internally Assessed Work on page 40. "Each successive statement builds upon the previous statement and candidates must have completed the lower statement before they can be awarded the next mark range."

In general, the standard of marking and internal standardisation by Centres for January 2010 was of a high standard.

Although a number of issues did arise :-

Annotation

Most Centres used the Front Cover Assessment Sheets giving the page numbers where evidence could be found. This helped with cross-referencing and 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 assessors are allocating marks benefits both the candidate and the moderator.

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

Arithmetic errors

A small number of Centres had different marks on the MS1 form to the mark on the Cover Sheet of the candidates work.

Before posting the coursework sample to moderators, Centres are reminded to double check that the mark on the MS1 is the same as the mark allocated to the candidate on the Front Cover of the coursework portfolios.

Marking Criteria

A small number of Centres had not used the OCR published marking criteria on pages 40 – 43 of the approved specification. Centres should not make up their own mark schemes, as this could harm their candidates results.

Communication Mark

Some Centres are being too generous.

Assessment Objective 1

Choosing and Describing Applications

Candidates performed well, the level of evidence for this section is getting better with every session.

Using Hardware & Using Software

Most candidates reached the higher mark threshold.

Inputting Data

Most candidates were in the 2/3 mark threshold. Candidates still need give more evidence as to how their designed system reduces the possibility of data errors, although there is now some evidence of this being put right.

System Output

Candidates are now performing well in this section, and the level of evidence for this section was much improved for this session.

Assessment Objective 2

Analysis

A very important aspect of coursework. Candidates who performed well here tended to perform well throughout the Unit. When done well, candidates maintained their focus and knew exactly what they were designing and why.

Design, Implementation, Testing

Centres should remember that the lower order marks relate to the Analysis and the candidates ability to identify and complete their ICT system.

Most candidates performed well, but to secure the highest marks candidates should annotate their own work giving reasons as to why changes have been made, why some designs have been retained and others discarded.

Some Centres were very generous in awarding marks for AO2b without any of the above evidence. These Centres often had their marks adjusted.

For full marks, candidates need to produce evidence of critical thinking, testing and refinements.

Evaluation, Application and Effects

This was the weakest aspect of coursework. Candidates did not compare ICT with other methods, or justify when and why using ICT is more appropriate.

Documentation

This could be improved by stating who the User Guide is aimed at. That will then focus the candidates into the type and detail of guide needed; e..g. is it for the employee or customer.

AO3

A number of candidates did not attempt this assessment objective. Those candidates, who did, attempted this in various ways. Some had tried to meet the criteria within other reports, whereas some gave this a discrete section within the coursework.
If candidates identified the person/people who would benefit from their system, then again this focuses the candidate better.

AO4

Again those candidates who scored well on "the use of ICT in the wider world" did so using a discrete section of coursework.

2379 Coursework Extension Task

General Comments

Candidates following this course were advised to submit coursework based on the use of ICT and the Environment – most used the guidance as provided during OCR INSET.

Centres had taken notice of the 2nd paragraph of 7.1, Marking Criteria for Internally Assessed Work on page 40. "Each successive statement builds upon the previous statement and candidates must have completed the lower statement before they can be awarded the next mark range."

Annotation

Most Centres used the Assessment Sheets giving the page numbers where evidence could be found. This helped with cross-referencing and aided the moderation process.

Some Centres gave extra annotation within the coursework portfolios, and this was greatly appreciated by the moderating team.
Although annotation is not essential, its use is greatly appreciated and aids the moderation teams and is an example of best practice.

Arithmetic errors

A small number of Centres had different marks on the MS1 form and on the Cover Sheet of the candidates work.

Before posting the coursework sample to moderators, Centres are reminded to double check that the mark on the MS1 is the same as the mark allocated to the candidate on the Front Cover of the coursework portfolios.

Digital Submission

Not many Centres submitted work digitally. Those submissions came in various forms, from candidates being filmed while they explained their work, to Centres downloading candidates portfolios to CD. Many thanks to those Centres.

Submitting the same work for 2378 & 2379

Although it is possible for candidates to submit one portfolio for both 2378 & 2389, candidates must identify where the extension task begins.

The full portfolio can be assessed for the 2378 mark, but only the extension task can be assessed for the 2379 mark. Therefore it is possible for these candidates to get different marks for 2378 & 2379.

If the extension task is not clearly identified then the whole of the portfolio will be assessed as 2378 only.

Producing A Working System

Moderators look for a complete working ICT system, and Centres should be encouraged to send in digital evidence of websites rather than paper based portfolios. It is becoming apparent that some Centres are producing more and more reports. Moderators look at the work using the marking criteria not the volume of work.

Assessment Objective 1

Choosing and Describing Applications

In the main candidates performed well. Although only a few candidates commented in detail on the benefits and drawbacks of a selection of different types of hardware and software that could have been used, for the 4/5 mark threshold.

Using Hardware & Using Software

Again candidates performed well. Some candidates did not describe the benefits and drawbacks of their chosen hardware very well.
Inputting Data & System Output

Candidates linked these sections together and provided some excellent evidence.

Overall the performance at AO1 level was greatly improved from the summer session.

Assessment Objective 2

Analysis

Candidates who performed well here tended to perform well throughout the coursework. When done well, candidates maintained their focus and knew exactly what they were designing and why. Overall those candidates who scored highly had put in a lot of work into this section. Probably more than the 5 marks merited but candidates benefited in the final mark.

Design, Implementation, Testing

Most candidates performed well, but to secure the highest marks candidates should annotate their own work giving reasons as to why changes have been made, why some designs have been retained and others discarded.

Some Centres were very generous in awarding marks for AO2b without any of the above evidence. These Centres were more likely to fall outside of tolerance and have their marks adjusted.

Evaluation, Application and Effects

This was the weakest aspect of coursework. Candidates did not compare ICT with other methods, or justify when and why using ICT is more appropriate.

Documentation

Candidates performed well here, there was some good evidence of testing and refining user guides.

AO3

Candidates attempted this in various ways. Some tried to meet the criteria within other reports, whereas some gave this a discrete section within the coursework. Moderators reported that those Centres who tried the former not only found the annotation more difficult to follow, but in some cases the Centre had not given the candidate their full credit.

Candidates need to link their discussion of AO3 to their task, some are too generic to score in the top range. If candidates identified the person/people who would benefit from their system, then this focuses the candidate to meet the marking criteria.

AO4

Those candidates who scored well on "the use of ICT in the wider world" did so using a discrete section of coursework.

2380/01 Foundation Tier (Written Examination)

General Comments

The examination paper allowed candidates to demonstrate their ability in this subject, and the questions catered for a differentiation in the level of the candidate's ability. Although the questions were appropriate for this level of examination, many candidates found difficulties in understanding and interpreting what was being asked in the questions. It is important that candidates are encouraged to read the questions carefully before writing their answer. Questions were often answered by candidates without any reference to ICT, and general knowledge about the environment was used instead.

The style of the question paper is well established and the candidates should be well prepared for the type of question asked. A significant number of candidates did not attempt some of the questions. This is surprising as the topics listed on the pre-release case study state the areas to be researched prior to the examination and this gives an indication as to what to expect in the examination paper. Although it has been stated in previous reports, candidates are still giving brand names for software e.g. Excel, Access etc instead of generic names such as spreadsheet and database. No marks are awarded when brand names are given by the candidate.

Comments on Individual Questions

Question 1
Very few candidates gained full marks for this question. This was surprising and concerning as this type of question has been asked in many previous papers, and candidates should be able to distinguish between input and output devices. The most common mistake was labelling CD Drive as an input device, not a storage device. It was concerning to see some candidates labelling the inkjet printer as an output device yet labelling the laser printer as an input device. Other common errors included scanner and graphics tablet being labelled as output devices. Very few candidates gave more than one tick per line. In cases where this happened neither tick was marked as correct.

Question 2a
This question was not well answered with very few candidates gaining more than one mark for this question. Many candidates showed little ability in giving the advantages and disadvantages of a LAN over stand alone computers. It seems as if candidates are not aware of the advantages of a LAN, even if they use a LAN in their school. Many candidates gave vague answers such as 'can communicate easier or 'can be used over long distances'. Some candidates gave the advantages and disadvantages of a LAN over a WAN in this question.

Question 2b
This question was quite well answered with the majority of candidates achieving two or more marks. Most candidates were able to distinguish between the geographical properties of a LAN and a WAN, but few were able to expand on these definitions to gain additional marks. A high number of candidates did not achieve any marks for this question, which was surprising as LAN and WAN were expressly listed on the topics to be researched in the pre release materials.

Question 3a
Most candidates achieved one or two marks, with very few candidates gaining three or four marks. Most marks were gained for the correct answers in the input and decision boxes. Candidates confused the correct actions for the action boxes with answers C and D.

Question 3b(i)
This question was not well answered with many candidates giving 'thermometer' or 'sensor' for the device. As stated in other reports to Centres, it should be emphasised to candidates that a thermometer is not a sensor device.

Question 3b(ii)
This question was very badly answered, with only a small minority of candidates gaining any marks. This was due to the candidates reading the question incorrectly, and not giving reasons for having such a device in each room. Instead, many explained how such a device would work.

Question 4
This question was not well answered, with many candidates giving examples of electronic communication rather than the benefits of electronic communication. Many candidates gave vague answers such as quicker, cheaper without any expansion of their answer, and so gained no marks.

Question 5
It was very disappointing how many candidates gave brand names in their answers and consequently lost all the marks for this question. Every report for previous examinations has stated that the use of brand names will not gain any marks, but candidates still insist on giving answers such as Access, Excel etc. Candidates need to be exact when writing the type of software in order to get their mark e.g. word processing software, not word processor DTP and not publishing software. Consequently, very few candidates achieved good marks for this question.

Question 6
This question was generally well answered with many candidates achieving full marks.

Question 7
This question was very poorly answered, with very few candidates gaining any marks. There were many candidates who made no attempt to answer this question. Some candidates clearly had no idea what bitmap and vector file formats were. Those who did know mostly mentioned pixels or dots and the idea of a jagged image when enlarged. Very few candidates were able to describe vectors adequately to earn 2 marks.

Question 8a
This question was answered well by the majority of the candidates, indicating a sound knowledge of data validation. Marks were lost in cases where candidates entered more or less than the two ticks required.

Question 8b
The majority of candidates gained one mark only, mainly for the correct answer for batch processing. Candidates were confused between the definitions for validation and verification.

Question 9
This type of question has appeared in many previous examination papers. The question required the design of a web site, showing the outline design of multiple pages and the links between them. However, most candidates assumed that the design of a web page was required, without reading the question carefully. Consequently many candidates achieved very few marks, even though they had produced a very well designed web page. Only a minority of candidates drew good tree type structures to show a website design with links between the home page and the other pages, at least four other pages and pages that clearly linked to the company, EnviroMax.

2380/02 Higher Tier (Written Examination)

General comments

<u>Overall performance</u>

Many candidates answers were not sufficiently full, with levels of spelling, punctuation and grammar being poor.

It was noticed that too many questions were left unanswered, especially as the pre-release gave a good list of topics to revise. It seems that many candidates were not ready for the examination or needed to be entered for the foundation paper.

<u>Questions answered well</u>

Question 3 (b)
Generally, all candidates gained 1 out of 2 marks on this question as it was easier to see what this part of the question required of them, compared to 3 (a). Many candidates also provided a correct 2nd answer.

Question 6
This question was generally answered well by most candidates.

Question 8 (a) and (b)
These two questions were generally understood and candidates picked up some marks on both sections, as long as they read the question.

Question 9 (a)
The first section of this question was either answered well, and their points were related to a business environment. However, candidates just wrote the rules expected in a classroom environment, which is so different to the work environment, hence not showing sufficient understanding of how health and safety relates to ICT in the work place.

Question 10
Most candidates picked up 2 marks out of 4 as they could explain problems related to eye sight.

Question 13 (a) and (b)
These two questions saw most candidates gaining 1 mark on each section. However, 13 (a) was the poorer of the two, as candidates did not relate the benefits/limitations to the company, despite EnviroMax being in bold.

<u>Questions not answered as well</u>

Question 1
Despite having **Do Not** in bold, so many candidates still used brand names, candidates need to understand that they must not refer to these during the examination.

Question 2
Candidates seemed to have a problem knowing what purchasing did, and many candidates just wrote a similar answer to what was in their manufacturing section. Most candidates picked up one mark within the manufacturing section, but generally a poorly answered question.

Question 3(a)
Very few candidates had any understanding of what the question wanted. Candidates were unable to relate the uses of electronic communication to a business and how it would help to improve the business. This was a question, applying ICT knowledge rather than producing facts, but many candidates, despite being entered for the higher level, did not apply their knowledge.

Question 4(a) and (b)
Very few gained any marks for part (a) as they did not understand or have the knowledge about how their phone, laptop etc connects to the Internet. "Connection to the Internet" was in the pre-release.

Very few understood or took note about the word 'remote'. But, this part of the question was picked up by very few candidates.

Question 7
Since GUI was in the pre-release, it was assumed that this would be a chance for candidates to pick up 4 out 8 marks as a minimum.

Question 9b
Many candidates showed they could not apply their knowledge to this question.

Question 11
Most gained 2 marks out of 9 for this question as they did not read the question. A structure or tree diagram was rarely produced by any candidates despite it being asked for, and an approximate number of pages needed was given. Most candidates drew one page, with much detail. Some either ran out of time or did not understand what was required of them, and left it blank. Many candidates had seen the word "website" and perhaps misinterpreted this to mean web page, hence most of the candidates that attempted the question, designed only one page.

Question 12 (a) and (b)
Very few candidates knew what an operating system was, despite it being on the pre-release exploration notes. Likewise, very few could explain about what a peripheral driver did.

Question 12 (c)
This should have been a straight forward question but candidates seemed not to understand what was required. The question was either left blank, had a list of software written or 1 or 2 correct answers provided. Input methods are a basic topic that all candidates should know.

Question 12 (d)
Despite the Pre-Release stating that methods of preventing data errors would be areas that needed to be explored, many candidates could not give validation or verification. Some were able to describe the terms, but a lot of candidates did not attempt the question. This topic should be understood by candidates entering at this level.

Question 14
Candidates did not relate the question to previous information/facts given. If marks were awarded it was for "too cold". If suggestions were written for what to do, most suggested that turning the air conditioning on or off was the answer to either being too hot or too cold. Very few candidates considered that turning the heating on or off would be the sensible thing to do.

Compared to previous years', this was a straight forward question answered badly, as candidates struggle to follow logic or understand what a flow chart requires of them.

Grade Thresholds

General Certificate of Secondary Education
ICT B (1095/1995)
January 2010 Examination Series

Unit Threshold Marks

Unit		Maximum Mark	a*	a	b	c	d	e	f	g	u
2377F	Raw	40				37	32	27	23	19	0
	UMS	55				48	40	32	24	16	0
2377H	Raw	40	39	36	32	29	27	26			0
	UMS	80	72	64	56	48	40	32			0
2378	Raw	64	63	57	49	41	35	30	25	20	0
	UMS	120	108	96	84	72	60	48	36	24	0
2379	Raw	64	63	57	49	41	35	30	25	20	0
	UMS	120	108	96	84	72	60	48	36	24	0
2380F	Raw	55				27	22	18	14	10	0
	UMS	55				48	40	32	24	16	0
2380H	Raw	80	49	42	35	28	19	14			0
	UMS	80	72	64	56	48	40	32			0

Specification Aggregation Results

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

	Maximum Mark	A*	A	B	C	D	E	F	G	U
1095	200	180	160	140	120	100	80	60	40	0

	Maximum Mark	A*	A	B	C	D	E	F	G	U
1995	400	360	320	280	240	200	160	120	80	0

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

	A*	A	B	C	D	E	F	G	U	Total No. of Cands
1095	7.8	36.0	58.1	75.0	89.7	95.1	98.0	99.5	100	408
1995	0.0	5.1	20.7	52.0	77.8	91.4	99.0	100	100	198

616 candidates were entered for aggregation this series

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

Statistics are correct at the time of publication.

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