



# Information & Communication Technology B

General Certificate of Secondary Education GCSE 1995

General Certificate of Secondary Education (Short Course) GCSE 1095

## **Report on the Units**

## June 2006

1995/1095/MS/R/06

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All Examiners are instructed that alternative correct answers and unexpected approaches in candidates' scripts must be given marks that fairly reflect the relevant knowledge and skills demonstrated.

The reports on the Examinations provide 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.

Mark schemes and Reports should be read in conjunction with the published question papers.

OCR will not enter into any discussion or correspondence in connection with this mark scheme or report.

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#### Report On Coursework Component for ICT B Syllabus 2378

#### **General Comments**

Candidates following this course were guided to submit coursework based on a Health Centre in line with the guidance provided at INSET.

The vast majority of Centres followed either the Wage Slip scenario or one of the sample assignments linked to advertisements found in the 'Approved Specification'.

Most Centres had taken more notice of the 2<sup>nd</sup> 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 by Centres for June 2006 was of a high calibre.

Although there was evidence of a significant minority of Centres NOT performing any kind of internal standardisation. This led to some Centres having their sample returned and being asked to remark all coursework portfolios.

A number of issues continue to cause concern:-

#### 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 tutors are allocating marks benefits both the candidate and the moderator.

#### Arithmetic errors

A small 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), to the mark on the Cover Sheet of the candidates' work.

In a minority of cases, when adding up the marks on the Cover Sheets, that mark did not match the mark in the Total column.

In other words a minority of Centres gave us 3 different marks for one candidate. This slows down the moderation and must be addressed for the next examination period.

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.

#### MS1s

When completing the MS1s, Centres need to ensure that the intended mark is clear on the copy sent to the moderator.

Quite often Centres had written 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

that the moderator's copy was clear enough to request a fair sample. Again this slowed down the moderation process.

#### 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.

#### Centre Authentication Form (CCS160)

OCR now requires this form duly completed by all Centres. Failure to do so could delay in results being released.

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

#### Writing Frames

Some teachers often award marks for any content in the space provided, others seem very particular about what is written. This sometimes gives the moderators the impression that no-one has actually read the content and credit has been given for anything written in the space.

Writing frames are limiting the students' scoring potential, often far too rigid for our higher scoring candidates. Individuality and experimentation is being stifled.

#### Witness Statements

In a significant number of instances witness statements are being too loosely applied. Comments are too generic and are sometimes being used to support a whole section. Correct use of witness statements (in most cases) will be to support the odd mark or two within a section and will have specific comments to support that decision.

#### 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

Again the level of evidence suggested some very good teaching and learning, most candidates reached the higher mark threshold.

#### **Inputting Data**

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

#### System Output

Depending on the assignment chosen, not all candidates were able to describe alternative outputs or the benefits and drawbacks of each.

#### Assessment Objective 2

#### Analysis

Possibly the most 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 were the most vulnerable in having their marks adjusted.

#### **Evaluation, Application and Effects**

This was still 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 worker, client or patient.

#### AO3

A number of candidates did not attempt this AO. 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. Moderators reported that those Centres using the whole portfolio to support the awarding of marks for AO3 are being too generous in many cases, **AND** rarely offer any annotation to support their claims.

If candidates identified the person/people who would benefit from their system, then again this focuses the candidate to meet the marking criteria.

#### AO4

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

#### Report On Coursework Component for ICT B Syllabus 2379

#### **General Comments**

Candidates following this course were advised to submit coursework based on a Health Centre – most used the guidance as provided during OCR INSET.

Most candidates designed a multimedia presentation, either an interactive website or self diagnosis Power Point for their Health Centre.

Centres had taken notice of the 2<sup>nd</sup> 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. Some annotation or indication where tutors are allocating marks benefits both the candidate and the moderator.

#### Arithmetic errors

A small 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), and then a different mark on the Cover Sheet of the candidates work.

On top of that when adding up the marks on the Cover Sheets, often that mark did not match the mark in the Total column.

In other words a significant number of Centres gave us 3 different marks for one candidate. This slowed the moderation period this year.

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.

#### MS1s

When completing the MS1s, Centres need to ensure that the intended mark is clear on the copy sent to the moderator.

Quite often Centres had written 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

A significant number of Centres had not used the OCR mark scheme and/or Cover Sheet. Centres must not make up their own mark schemes.

It would also help if Centres would get their MS1 to moderator by the May deadline. Then send the coursework promptly.

Please try to get candidates to avoid sending coursework in a pile of plastic folders, they are very slippery and difficult to deal with.

#### **Digital Submission**

Not many Centres submitted work on disk. I was hoping that by now, more Centres would be submitting work on a different media than paper.

#### 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 System

Moderators look for a complete working 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 printing off more and more irrelevant work. Moderators look at all coursework using the marking criteria, not the volume of work. Centres should be encouraging their candidates to show more flair in their design and working system.

#### **Centre Authentication Form (CCS160)**

OCR now requires this form duly completed by all Centres. Failure to do so could delay in results being released.

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

#### Writing Frames

Writing frames are limiting the more able students' scoring potential. Some writing frames are far too rigid and diminish individuality and experimentation.

#### 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. Although 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.

#### 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 Written Paper

#### General

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. The levels of achievement in this examination were wide ranging, but only a few candidates achieved very high marks. In the majority of cases, candidates attempted to answer every question, but some questions were answered far better than others.

Some questions were generally well answered such as 1,3(a), 3(b), 4, 5, 6 and 10 but on other questions such as 2 and 9 candidates did not score good marks.

Questions that tested the knowledge of particular hardware and software, such as questions 2 and 3(c) were not well answered.

Candidates did not always read the questions carefully in order to understand what is required in the answer. For example, in question 8 candidates stated the features of linking the Health Centres rather than the advantages.

Candidates need to be discouraged from answering questions using the single words 'quicker' and 'easier'. In order to gain the relevant marks these words need to be qualified by saying how it is quicker or easier. This was especially relevant in questions 2, 3(c), 7 and 9a.

#### Q No)

2

- 1 This question was generally well answered, although a surprising number of candidates did not gain full marks. Common mistakes included the DVD and plotter as input devices and the digital camera as a storage device.
  - This question was not well answered. Common incorrect answers included 'it is quicker', 'faster', 'more efficient' etc
- **3** (a) This was generally well answered.
  - (b) This was generally well answered.
    - (c) This question generally was not well answered. Common incorrect answers included 'so the doctor can tell if they are male or female', ' because it's quick', 'easy to see' etc
    - (d) This was generally well answered.
  - (e) This question was very poorly answered. Many candidates did not understand the concept of field length and many gave the answer as a measurement in cm eg 2 cm long.
- 4 This question was generally well attempted with the majority of candidates gaining at least four or five marks out of the possible eight. Those who did not achieve many marks just gave a list of health problems eg back ache, eye strain without relating it to the poster or ICT health issues
- **5** (a) Many candidates gained one mark here, but relatively few gained the second mark for stating that viruses are programs.
  - (b) Generally well answered, with most candidates gaining at least one mark here. Those who only achieved one mark were generally able to list anti-virus programs although there remains some confusion over the use and purpose of firewalls.
- 6 (a) The majority of candidates gained the mark here, but a common mistake were those who listed 'hacking'. The question asked for the name of a person, not the act. Perhaps these candidates need to read the question a little more carefully.
  - (b) Generally well answered
  - (c) Generally well answered.

- 7 This question was not well answered. Too often, answers were far too generalised, such as 'easier to use', ' it will give you all the information you need', ' can be read easier' (advantages) and incorrect answers for the disadvantage concentrated on the system not working eg 'lack of power' ' PC broken down' etc
- 8 (a) Most achieved the mark here.
  - (b) Generally well answered.
  - (c) Surprisingly, this question was not well answered. Many candidates could not demonstrate that they understood the terms Local Area Network (LAN) and Wide Area Network (WAN) nor understood the difference between them.
- **9** (a) This question was not well answered. Many of the advantages given were too vague (eg 'faster') or related to the absence of other methods. Very few cited relative costings, attachments or multiple emails.
  - There were relatively more marks gained on the disadvantages.
  - (b) Many candidates listed non hardware items such as the Internet, ISPs, email software etc and so did not gain all the marks available.
- **10** Most candidates were able to gain at least one or two marks here; data storage of personnel details and calculation of wages were the two most common types of correct answer.

#### 2380/02: Written Paper

#### 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. The levels of achievement in this examination were wide ranging but much improved on last session. The paper was generally well answered, with most candidates attempting almost all of the questions.

The structuring of the questions gave opportunities for candidates of all abilities to gain some marks. There was however evidence of a general failure to interpret the context of the more searching questions and to tailor their responses to those contexts. Some candidates still do not read the entire question before composing their answers. Many also become lost if they are required to do more than quote verbatim from their notes; they struggle to apply a general principle to a specific scenario. A good example of this is applying the data protection principles to the context of the health centre.

#### **Question Comment**

- 1 Whilst more candidates achieved full marks for this question a number of candidates still use brand names and throw away easy marks by not reading the question.
- 2

3

4

5

- a) The majority of candidates coped with this section and gained good marks
- b) too many candidates were out of their depth with this section and demonstrated no knowledge of control systems or components; a lot of answers were based upon scanners, touch screens and mice.
- c) Many candidates struggled to get full marks on this question. They could say that a screen allows the doctor to view documents but failed to explain which ones he might look at or why. They could either say that a printer produces hard copy or is used to print prescriptions, but many could not include both.
- Generally good answers, though weaker candidates simply named conditions such as "RSI" and "eye strain" without referring to their causes and avoidance. Judging from their candidates, some Centres appear to be passing off their in-house rules (no eating, drinking, running, "scooting" etc) as HIS directives!
  - a) very few candidates had a clear understanding of what is "sensitive". Perhaps many Centres are not teaching this specific set of standard definitions?
  - b) Few candidates included enough material to get two marks on any principle. Where two marks are available examiners are looking for a description not a single word answer.
  - a) considerable confusion in the candidates' minds led to vague ramblings in the place of factual content. Candidates should understand the difference between analogue and digital data.
  - b) Few candidates could rise above "accurate and fast" type answers.
- Well answered question with a large number of candidates gaining full marks.
  a) This question generally elicited sensible responses from
  - a) This question generally elicited sensible responses from canidates

- b) a large number of candidates repeated their answer to a) and failed to gain any extra marks.
- Most candidates seemed to explain WAN reasonably, often c) referring to the Internet, but struggled with LAN.

Candidates seemed to either grasp the meaning and give reasonable answers for 3 marks, or go off in entirely the wrong direction, writing about the effects on the health centre and patients rather than the health centre staff. Where candidates did read and answer the question few gave enough amplification for full marks. Some wrote about an on-line booking system taking over from one used by receptionists in the health centre. Many candidates just stating that people would loose their jobs.

- Hardly any candidates could explain the sensor or system use in taking 9 blood pressure, and many gave vague answers to the other three tasks through an apparent failure to realise what was being asked. Many candidates failed to pick up 2 marks on any section, and those that succeeded tended to do so with the appointment or the reminder letter tasks.
  - a) a worrying number of inadequate responses such as " set out clearly and easy to read".
  - b) Very few candidates appreciated the coding of closed questions in order to analyse the data, and wrote about patients finding them easier to answer than open questions.
  - c) Reasonably answered, though many read the percentages from the totals in row 6 instead of Wordsworth's data on row 12.
  - d) Most candidates scored either 2 marks or none.
  - a) Many did not seem to understand that they were expected to show the actual layout and content of the leaflet. Some wrote out the instructions in detail with no regard to layout. Others planned a layout in skeletal form with placeholder comments where the content should have been. Some candidates simply drew a flowchart rather than answering the question.
  - b) Brand names abound where generic terms should be.

10

8

11

#### Report on the Units Taken in June 2006

#### General Certificate of Secondary Education Subject 1095/1995 June 2006 Assessment Series

## Unit Threshold Marks

Unit		Maximum Mark	a*	а	b	С	d	е	f	g	u
2377F	Raw	40	-	-	-	37	33	29	26	23	0
	UMS	55	I	-	-	48	40	32	24	16	0
2377H	Raw	40	38	34	30	27	23	21	-	-	0
	UMS	80	I	64	56	48	40	-	-	-	0
2378	Raw	64	60	51	42	34	28	23	18	13	0
	UMS	120	I	96	84	72	60	48	36	24	0
2379	Raw	64	60	51	42	34	28	23	18	13	0
	UMS	120	I	96	84	72	60	48	36	24	0
2380F	Raw	55	-	-	-	35	29	23	18	13	0
	UMS	55	I	-	-	48	40	32	24	16	0
2380H	Raw	80	54	47	40	33	27	24	-	-	0
	UMS	80	-	64	56	48	40	-	-	-	0

### **Specification Aggregation Results**

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

	Maximum Mark	<b>A</b> *	Α	В	С	D	Е	F	G	U
1095	200	180	160	140	120	100	80	60	40	0

	Maximum Mark	<b>A</b> *	Α	В	С	D	Е	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:

	<b>A</b> *	Α	В	С	D	E	F	G	U	Total No. of Cands
1095	3.1	14.6	34.5	53.9	67.7	79.4	89.1	96.3	100	14175
1995	3.1	15.7	38.5	63.0	78.2	88.2	95.1	98.4	100	9414

#### Report on the Units Taken in June 2006

#### 23589 candidates were entered for aggregation this series

For a description of how UMS marks are calculated see; <a href="http://www.ocr.org.uk/OCR/WebSite/docroot/understand/ums.jsp">www.ocr.org.uk/OCR/WebSite/docroot/understand/ums.jsp</a>

Statistics are correct at the time of publication

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