

GCE 2005

January Series



Report on the Examination

Information and Communication Technology

- Unit 1 (ICT 1) Information: Nature, Role and Context
- Unit 2 (ICT 2) Information: Management and Manipulation
- Unit 3 (ICT 3) Coursework: The use of Generic application Software for Task Solution
- Unit 4 (ICT 4) Information Systems within Organisations
- Unit 5 (ICT 5) Information: Policy, Strategy and Systems
- Unit 6 (ICT 6) Coursework: Use of Information Systems for Problem Solving

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Information and Communication Technology

General Comments

In this January series of the examination, there was clear evidence that many candidates were well prepared for the examination(s) that they were taking. It was pleasing to note that very nearly all candidates attempting the AS units answered all the questions on the paper. However, this was not always the case with the A2 papers, particularly ICT 5, where some candidates did not seem to have knowledge of all topics covered by the specification.

It is pleasing to note that a significant number of candidates are now encouraged to space out their answers to questions, although some continue to leave no space between answers. This results in a number of instances of additional text which is scattered throughout the answer booklet and which leaves the answer untidy and difficult for the examiner to follow.

The use of brand names in response to questions which ask for examples of software seems to be on the increase again after a period of decline. In written papers candidates cannot gain credit for using brand names, as is clearly stated on the front of question papers. Candidates should respond to questions with references to generic types of software. Candidates need to be reminded to read the front of a question paper before beginning to read the questions themselves.

Candidates should be able to use the correct technical terminology. Yet again, some candidates lost marks by the use of careless or inaccurate terminology in their responses. This was noticeable across all the units.

AS Units

Unit 1 Information: Nature, Role and Context

Question 1

The standard of many candidates' answers to this question was poor. Candidates are reminded that data is plural so that the use of a single number as an example of input cannot gain credit. Also, candidates should check that their answer does not simply repeat the question for example, 'input is putting in the data,' would not gain credit.

Question 2

This question was well answered by many candidates but, in some cases, not fully enough to gain the second mark for the reason. Some candidates referred to general personal qualities and failed to gain high marks because they did not relate their answers to the context of the question.

Question 3

This question was well answered with a large number of candidates gaining full marks. It was pleasing to note that many candidates recognised the fact that the data was out of date because people's tastes change over time, although some candidates referred to issues which were covered on a previous question paper.

Question 4

This question was designed to assess the breadth of candidates' knowledge of Internet usage. In general, it was answered well. However, some candidates specified several *methods* for one 'way of using the Internet' and therefore could only be credited once. For example, the use of advertising on the Internet is one way; the *methods* of advertising include web sites, pop-ups and links to other sites. These methods could only be credited as part of the advertising response.

Question 5

A minority of candidates gained full marks for this question. However, many candidates could not state what the Prioritise or Attach functions allowed users to do. Better candidates wrote that, 'The Prioritise function allowed users to mark the message with a symbol to denote the importance to the recipient,' and that, 'The Attach function allowed users to send a variety of files, such as pictures, by adding them on to the mail message. All the user has to do is to select them from a list and the pictures are automatically added to the message.'

Question 6

It was pleasing to note that all the candidates from some centres gained full marks for this question. In general, most candidates could state the meaning of crime, but only the better candidates identified that malpractice is bad or incorrect practice caused by staff within an organisation who did not follow that organisation's rules or procedures.

Question 7

This question was generally answered well. However, responses that included reference to 'loose wires' could not gain credit unless they were clearly related to the computer workstation mentioned in the question.

Question 8

Very few candidates gained full marks for this question. Part (b), where candidates were asked to apply their knowledge about licensing to a given scenario, was answered poorly.

Question 9

In general this question was well answered. However, some candidates lost marks by not reading the question carefully enough and only considering the customer in part (a). The question asked for advantages to the *bank* and disadvantages to the *customer*. Only the very best candidates identified the benefit to the bank in part (c).

Question 10

Many candidates could not define the role of the Information Commissioner in part (a)(i). A common wrong answer was to define the role of a data controller within an organisation. However, most candidates could identify that a data subject was a person who has data held about him/her, but only

the better candidates went on to qualify their response to explain that the person needed to be living and identifiable.

Part (b) was also poorly answered with few candidates including items of data that form part of an entry on the Data Register. Responses that referred to the quality or security of data could not be credited. The data in the entry includes the following: the purpose that the data is stored for; the classes of data being stored; the recipients who have access to the data and organisations to which that data will be transferred.

Unit 2 Information: Management and Manipulation

Question 1

This question was generally well answered with the majority of candidates identifying two types of data stored in a file. Nearly all candidates scored one mark on this question and a high proportion scored the full two marks.

Question 2

Most candidates could clearly identify the difference in reach between a LAN and a WAN. Better candidates identified the difference in types of connection used or the difference in the speed of transmission of data as well.

Question 3

A straightforward examination question on a Unit 2 paper, however many candidates provided very weak answers to this question showing very little understanding of the 'Organisation of Data for Effective Retrieval' section of the unit. Frequently candidates made one or two relevant points and then made vague comments such as, 'is easier to use,' or, 'uses less storage space,' which could not be given credit. An example of a good response could read as follows.

'A relational database includes relationships between tables that allow the extraction of linked information. These links also mean that less duplicated data is stored so that data inconsistency is less likely when reports are produced. In flat file systems different copies of the same data can be used and these may not give the same results. These relationships, and only having single copies of data, give rise to the production of better quality management information.'

Question 4

Nearly all candidates gained full marks for this question.

Question 5

In part (a) a substantial number of candidates were not sure how to describe a macro and used examples instead of a description. This type of answer could only gain credit for part (b). A macro is a sequence of instructions which is defined as a single element and which performs a required task on a regular basis.

For part (b), most candidates could identify two valid examples of where the use of macros would be appropriate, but a few candidates listed only features supplied with an application package such as

‘print’ or ‘save’, rather than stating a specific example. ‘A macro could be recorded to print a specific area of a spreadsheet automatically e.g. an invoice,’ would have been a creditable response.

Question 6

Most candidates could provide examples of both validation and verification. Explaining the difference between the two types of check proved more difficult. Few candidates could identify that verification on input checks is carried out by comparison to see if the data has been altered during the input process, whereas validation checks check if the data is reasonable according to the rules set up for the input of data.

Question 7

It was pleasing to see that most candidates had read the question carefully and described the procedures required. A very small minority considered only the backup medium to be used and could gain little credit.

Question 8

In part (a) only better candidates gained full marks for this part of the question. A common omission was not identifying that generic package software is application software rather than systems software.

For part (b) many candidates could provide three appropriate examples. However, a worrying number of candidates either quoted only brand names or provided examples of systems software. These answers could not be credited.

Question 9

In part (a) most candidates could identify one or two advantages to the store, but only better candidates went on to describe the advantage. For example, identifying that it was, ‘easier for the store to change the price of an item,’ would gain one mark, but few candidates then tied this to the use of the EPOS system by stating that, ‘the price would now only need to be changed once at the till rather than on every item,’ in order to gain the second mark.

For part (b) most candidates could identify a disadvantage to the store, but again, only better candidates went on to describe the disadvantage.

Question 10

Most candidates could identify the features of a GUI but only better candidates went on to describe an advantage of the feature. Many candidates stated only a fact about the feature, rather than an advantage. For example, identifying the use of menus would gain one mark, but candidates then needed to state an advantage in order to gain the second mark. The statement that, ‘a menu is a list of choices,’ would not gain credit, but functions for use with a data projector. Worryingly some candidates referred to the use of colour and drawings, but these features are available to be printed on OHT sheets as well as being used with a data projector.

Part (c) elicited a wide range of responses. Better candidates identified a range of factors including the need to make the presentation appropriate to the venue; include content appropriate to the audience; set the content out in a style appropriate to the audience, whilst making use of good design principles (such as clear layout and avoidance of information overload). Weaker candidates often concentrated the answer around a single factor.

Question 11

For part (a), a minority of candidates confused the applications loaded onto the computer system with the operating system, and described features of an applications package. Such responses could not gain credit.

In part (b) most candidates could identify three functions of the presentation software that are available for use with the LCD (data) projector. Worryingly, however, some candidates referred to the use of colour and drawings, but these features are available to print on OHT sheets as well as being used with a data projector.

Part (c) of the question elicited a wide range of responses. Better candidates identified a range of factors, including the need to make the presentation appropriate to the venue, to make the content appropriate to the audience, to set the content out in a style appropriate to the audience whilst making use of good design principles such as clear layout, and avoidance of information overload. Weaker candidates often just concentrated the answer around a single factor.

Unit 3 The Use of Generic Application Software for Task Solutions

General Comments

The majority of project reports seen in this series were related to a task based problem and so were entirely suitable for AS level. However, some of the work seen continued to focus on producing a system and, by offering too much scope, the candidate was at times put at a disadvantage in relation to others.

Specification

The requirements work was often detailed, although the input, processing and output needs were occasionally insufficiently stated for the mark boundaries selected by centres. Designs, when lacking, were missing validation and formulae in spreadsheets. In database style projects there was often a focus solely on the visual aspects at the expense of processing or reporting specifications. Macro designs were often expected from the task descriptions given, but all too often they lacked detail or were completely absent.

Implementation

The implementation work seen was generally to an appropriate standard for the module and often produced operable solutions. Overall some good quality work was seen with clear documentation that offered an accurate explanation of how the solution had been developed. Weaker candidates, however, offered only partial solutions that tended to lack the essential functionality of the task described (for example, a solution that needed to generate a re-order list for a supplier, but no evidence was provided of this list being produced).

Testing

Testing suffered from issues which have been raised previously in Examination Reports with some candidates omitting a test plan altogether, whilst others offered little or no data. Weak test plans focussed too much on validation or navigation tests without truly testing whether the described task or tasks could be completed using the solution produced eg ensuring that the re-order list mentioned

above could be output. The testing itself was not always fully evidenced and some candidates offered no hard-copy evidence at all in support of their testing. In particular, corrective action was not always clearly indicated. It is essential that testing reveal errors or inefficiencies, which the candidate should then identify, correct and re-test.

Evaluation

Evaluations often failed to consider a relevant range of assessment criteria for a task-based ICT solution.

User Documentation

The user documentation was generally well attempted, although common problems were not always considered in the depth or detail expected.

A2 Units

Unit 4 Information Systems within Organisations

Question 1

Part (a) required a definition of a Management Information System (MIS). Most candidates could give an answer which gained both marks (and could have gained more if more marks had been available). However, there are still some candidates who confuse ‘Data’ with ‘Information’, or who think that a MIS ‘collects’ data, without any processing.

For part (b) many candidates gave no example situation at the strategic level, or they gave a lower, tactical level example. Better candidates gave an example that indicated overall, summary or comparative sets of figures with which to make long-term or strategic decisions, such as a supermarket Managing Director using annual turnover figures for every store from the Financial Information Systems to decide whether to shut a store down or open another one in the area.

Question 2

Many candidates failed to answer the question with factors that are considered when writing a Corporate Information Systems Strategy; most put their answers at ‘the new Information System’ level and thus gained a few descriptive marks but rarely accessed the full six available. The factor list is clearly spelt out in the specification. A few candidates confused this strategy with the security policy that is also covered in the ICT4 specification. Some candidates did not attempt this question.

Question 3

Most candidates scored well here. However, poor examination technique meant that candidates who did not read the question correctly lost a mark for offering the ‘communication’ answers such as ‘Management involvement in Analysis’ or ‘End User involvement in Design’. Also candidates who provided a long paragraph in answer to a ‘Give’ could gain no further credit.

Question 4

Part (a) asked for a definition of an IT Code of Practice – this is not to be confused with the Code of Conduct, which is more general behavioural guidance. The difference between Code of Practice and Code of Conduct is given in the specification on the AQA Website, but candidates are still not distinguishing between them. The IT Code of Practice in this specification is always for people using the IT facilities and systems in an organisation.

Part (b) of the question gave ‘the use of company hardware’ in the stem to help steer candidates towards giving correct answers. Most candidates gained at least half marks here.

Question 5

Part (a) asked candidates for ways of giving training and part (b) asked for ways of giving support to a user. A few candidates mixed these up, but most were able to offer two or three ways in each category. The training question was answered less well than the support question with many candidates failing to describe, either by extension or example, what they meant by a particular training option. Some candidates lost marks by merely offering ‘internal training’ or ‘external training’, when they needed to be more specific. Candidates often failed to gain marks because they offered many similar ways of providing training/support eg Bulletin Boards and internet/intranet sites, meaning the same idea. Many stronger candidates scored very well on this question.

Question 6

This question required candidates to apply their knowledge about the characteristics of good information and apply it to a specific situation (Internet shopping).

Part (a) gained most candidates at least three marks for three valid characteristics, and many more gained the other three marks for correctly giving a relevant example in the context. However, some candidates are still failing to show their understanding of the difference between characteristics. For example, the examples for accurate and up-to-date characteristics were often either confused or repeated. There were some candidates who gave valid examples for the characteristic but completely out of the context given and instead cited banking and school situations.

Part (b) was fairly well answered, although some candidates had difficulty differentiating between what was a benefit for the customer (such as the confidence that they would receive exactly what they had ordered and it would be delivered exactly as they were told) and what was a benefit for the company (such as gaining customer satisfaction so customers will return, giving increased profits).

Question 7

Part (a) was well answered, with most candidates gaining one or both marks, although some candidates really had no idea at all about licensing or how networks are set up, offering illegal or totally impractical solutions.

Part (b) gave candidates an opportunity to apply their knowledge of different security measures to prevent software misuse in a particular context. Many candidates scored at least half of the available marks. Some candidates were still focussed on the part (a) situation and failed to gain any more marks.

Question 8

Part (a) was mostly well answered, with weaker candidates allowed marks for expressing themselves less technically (eg ‘bad handwriting’ instead of ‘translation problems’).

Part (b) was less well answered by many candidates. Most candidates gained their marks with good descriptions of Optical Character Recognition, Optical Mark Recognition and Keyboard entry. Some candidates offered Bar Code Scanning, which only gained marks if it obviously referred to identifying the actual questionnaire, rather than any answers within it. Anything to do with magnetic ink, or the supposition that every household has e-mail was not credited. A few candidates gained no marks as their answers were about data collection, rather than data capture.

In part (c) the majority of candidates knew what was meant by, ‘effective method of presentation,’ but some lost the marks by giving the impression that ‘a pie chart’ or ‘a graph’ would be sufficient. As there would doubtless be many questions on a questionnaire, a single answer was not enough. Credit was given to the many candidates who offered reports or slide-show presentations or multiple charts and graphs, and to those who remembered that the findings were for local authority management.

Question 9

Part (a) was well answered by the stronger candidates who showed understanding of the concept of risk analysis for an organisation. Risk analysis is seen as an element by element analysis of value and threat, followed by the application of an objective ‘risk factor’ applied at the element level. From this the calculation of an overall ‘risk level’ is made to provide guidelines as to how much effort and money should be put into a contingency plan if disaster hits.

In part (b), many candidates got caught up in thinking that flooding was the only threat to this practice and based all their ideas around water and electrical equipment. However, the better candidates offered another threat (eg the threat of hackers gaining access to patient data) with adequate counter-measures to gain some, if not all of the marks available. Credit was given if two countermeasures were offered for the same threat if that benefited the candidate. Some unrealistic counter measures were offered (such as having a completely new system ready) which did not gain credit.

In part (c), weaker candidates based their answers on the backing up of data. This response did not address the question. To gain marks answers needed to be about the criteria that are looked at when writing the contingency plan, such as, ‘How important is the data?’ ‘How quickly must the organisation be back up and running?’ Stronger candidates scored well, gaining all three marks.

Question 10

The essay question was about the use of ICT teams when developing large Information Systems. Candidates scored across the full range of marks on this question. There were many good responses, with candidates being able to reel off characteristics of successful ICT teams, whilst also remembering some of the advantages of using teams and some of the methods of developing Information systems. However, some candidates offered a lot of irrelevant discussion about all sorts of unrelated topics, especially in response to the first bullet about the use and organisation of ICT teams.

Most candidates offered an introduction which was usually closely aligned to the question.

Many candidates could give relevant reasons for splitting a project up and allocating different parts of the project to different teams, each with their own plan, their own leader, and so on. Some, but not many, candidates scored the maximum six marks in this section, but most scored three or four. A minority of candidates wrote about organisational structure and different levels, and information flow; these could gain no credit.

Most candidates scored well on team characteristics, although some (incorrectly) focussed on individual person characteristics, rather than team ones. Some weaker candidates merely offered a list of characteristics with little expansion or discussion, thus gaining only one mark for the whole list. At

Advanced Level, particularly in an essay question, responses should be made in complete sentences with some expansion to show understanding.

Formal methods for the development of information systems (bullet three) were addressed in a mixed way. Many candidates mentioned a development life cycle, either generically or by name, which gained a mark, but then went on at great length to describe in detail all stages of that life cycle to gain the single extension mark available. However, discussion about progress meetings, schedules and deadlines, deliverables and sign-off, gained more marks, and this was the second best section for most candidates.

The quality of written communication was generally reasonable, although a lot of incorrect spellings and many grammatical errors were seen. To gain the higher language marks the essay must have structure and relevance. In addition, candidates must make good use of English, and sentences and paragraphs must be logically and smoothly linked. Candidates did not help themselves by using diagrams and lists of life cycle stages. Candidates must remember that the essay question is supposed to be written in 'continuous prose' and the four available marks for the quality of written communication reflect this. Once a candidate strays from the 'continuous prose' requirement, the most marks that can be gained is two.

Unit 5 Information: Policy, Strategy and Systems

Question 1

Generally, this question posed few problems for candidates and many gained full marks. If marks were missed, it was owing either to the use of one-word answers that did not say enough (for example, the word 'bespoke'), or through answers that did not refer to how software could be obtained, but rather to categorising software types.

Question 2

This question allowed the weaker candidates to name the different ways in which a company could use a network, and also permitted the stronger candidates to describe that use. Candidates who failed to score highly on this question tended to use quite vague ideas that were not substantiated in relation to networking. For example, candidates referred to 'security' without really making this concept network specific.

Question 3

This question was not tackled well by candidates. In most cases this was due to the fact that they considered purely network issues (primarily access rights), rather than the effects of using a network on the interface presented. Candidates need to appreciate that 'read/write, read-only' are not the only responses that deal with network issues.

Part (a) proved to be the easiest part of this question for candidates, with many being able to cite the appearance of a login screen asking for username/password as a possible difference.

Part (b) required the candidate to consider the effects of controlling software use. Many candidates related this to access rights, but did not extend this to suggest an effect on the interface (for example, notification that the number of active licences was at maximum). Credit was given for discussing that the icon for a piece of software might be altered in some way.

Part (c) concerned control of files and again candidates tended to relate to access rights, rather than discussing effects such as notification that a file would be opened as read only, or requiring a password to open for viewing or editing.

Part (d) dealt with control of resources. Better candidates were able to write about physical resources such as printers, and the fact that different printers might appear for different users. This part did allow candidates the opportunity to revisit the same ideas as the previous parts and not be penalised.

Question 4

The vast majority of candidates were able to relate to this question and so were able to meet with some success, at least with parts (a) and (b), which required the candidate to identify a suitable type of user interface and describe why it is suitable in the given situation. It was pleasing to note that many candidates were able to answer well within the given context. Those who were less successful tended to give answers relating to devices (for example touch screen) throughout, rather than the type of interface (either menu driven or graphical in this case).

Part (c) caused many problems as candidates either discussed actual input or output expected at an ATM, or input and output devices expected at an ATM. Very few candidates gave the *characteristics* of these devices as was required in the question. Good answers given here mentioned, for example, that keypad input required only a limited number of keys, or that displays had to be visible in greatly varying light conditions. It is important that candidates should not only know which devices can be used in a given situation, but also know what makes the device in question suitable for the use to which it is to be put.

Question 5

This question dealt with the area of relational database design. It was pleasing to note that candidates were clearly able to display their knowledge, and that even the weaker candidates were able to show some basic understanding of the concepts involved. It is also worth noting that candidates were able to show that they appreciated the difference between how to normalise (part (b) and why to normalise (part (c), although weaker candidates did sometimes confuse the two. Many candidates were able to give examples to address the questions and credit was given where the example showed understanding.

Question 6

Questions dealing with the application and use of evaluation criteria are traditionally well answered, and this proved to be no exception.

In part (a), candidates were able to show some understanding as to why initial meetings take place, and so were able to gain some marks here.

Generally part (b) was answered well, with stronger candidates able to relate the criteria to the context. Weaker candidates gave more general responses. The term ‘cost-benefit’ caused problems, with many candidates relating this directly to how much the new Management Information System would cost, rather than comparing the short-term outlay to the long-term gain by the user.

Responses to part (c) indicated a good understanding by candidates of the role and content of the final report, with a significant number of better candidates gaining full marks.

Question 7

Candidates of all abilities were able to gain marks on this question. When candidates failed to score it was owing to a lengthy discussion of how information could be gained to fix the problems, rather than how the problem fix could be distributed.

Question 8

Responses to this question showed that candidates understood what a protocol is, but indicated that candidates did not understand why they are important. Generally there would seem to be a weakness in the understanding of this area of the specification.

Part (b) related to protocols and data communication. Many candidates, several of whom were strong in other areas, discussed Uniform Resource Locators (URLs) and Hypertext Transfer Protocol (HTTP), but missed the point that this was to do with the underlying infrastructure which supports moving data around. Better responses were able to relate to consistent addressing mechanisms, and could have also addressed how standards allow for error detection and correction.

Part (c) related to protocols and data representation. Again, many candidates followed the URL argument, but ignored the idea of consistent ways of representing data, for example bitmapped graphics or ASCII encoded text files.

Question 9

This question was generally approached well by candidates, with a range of marks being gained. Weaker candidates were able to show basic knowledge, whilst stronger candidates could relate their knowledge to the given context. A number of candidates did structure their answers as reports, and this would seem to have given more structure and focus to the answers.

Discussions of why and how to upgrade hardware, and why and how to upgrade software showed the range of understanding of candidates, with weaker candidates able to give simple general points, and better candidates able to expand upon relevant points and respond within the given context. Weaker candidates often wanted the specialist hardware to no longer be specialist, and also suggested that specialist and generic software be rewritten and all software be bespoke.

Responses to outlining a backup strategy showed again that some candidates had a good understanding of this area. Candidates failed to gain marks when they did not fully explain their responses, and simply listed points relating to backup. Weaker candidates were expecting the partnership of architects to back up onto media such as 'CD' or floppy disk. At this level it is expected that candidates will be aware of both the correct terminology (CD-R or CD-RW is acceptable; CD is not) and relevant capacity (there is still evidence of candidates expecting companies to use floppy disks as a backup medium).

Unit 6 The Use of Information Systems for Problem Solving

General Comments

There were few entries seen for this module in this session and all of the work was implemented in Microsoft Office using Access.

Standards, from the limited sample seen, were sound and generally relevant to the requirements of this module. However, some familiar issues still need to be addressed. For instance, candidates should be

reminded that, while a task based solution is expected for module ICT3, the key issue for ICT6 is, ‘... to produce an information *system* for a real end-user.’ In addition, genuine interaction between the candidate and the end-user is an *essential* requirement for this module and has a critical effect on the assessment. Candidates should be specifically reminded that this is essential within the testing section if a high mark is to be considered by supervisors.

Work for this module is expected to reflect a realistic situation where data is expected to change over time. In some candidates’ work there continued to be, however, inappropriate work focussing on ‘one-off’ solutions. These solutions either solved a single problem with no need for reusability or trivialised solutions so they could not be operated over time. A further issue was solutions that implemented a large number of small tasks within a single organisation, none of which were really appropriate for ICT6 alone but did not interact with each other and so failed to provide a sound basis for this module.

One cause for concern when moderating centres’ marking in this series was implementation effort which lacked adequate proof of a working solution, yet awarded high marks. Another remains the analysis section where too often the work is over marked, as inadequate evidence can be found in the candidate’s reports to support the mark boundaries selected by the supervisors. For example, inclusion of a single data flow diagram is relevant, but on its own is inadequate to fully identify the information flow and data dynamics of the problem.

Mark Ranges and Award of Grades

Unit/Component	Maximum Mark (Raw)	Maximum Mark (Scaled)	Mean Mark (Scaled)	Standard Deviation (Scaled)
Unit 1- Information: Nature, Role and Context	60	60	33.1	8.4
Unit 2 - Information: Management and Manipulation	60	60	30.4	10.0
Unit 3 - The Use of Generic Application Software for Task Solution	60	60	29.2	10.8

For units which contain only one component, scaled marks are the same as raw marks.

Unit 1 - Information: Nature, Role and Context (15615 candidates)

Grade	Max. mark	A	B	C	D	E
Scaled Boundary Mark	60	45	40	35	30	25
Uniform Boundary Mark	90	72	63	54	45	36

Unit 2 - Information: Management and Manipulation (7582 candidates)

Grade	Max. mark	A	B	C	D	E
Scaled Boundary Mark	60	43	37	32	27	22
Uniform Boundary Mark	90	72	63	54	45	36

Unit 3 - The Use of Generic Application Software for Task Solution (727 candidates)

Grade	Max. mark	A	B	C	D	E
Scaled Boundary Mark	60	42	36	30	24	18
Uniform Boundary Mark	120	96	84	72	60	48

Advanced Subsidiary award

Provisional statistics for the award (793 candidates)

	A	B	C	D	E
Cumulative %	5.2	23.6	50.2	77.7	94.3

Unit/Component	Maximum Mark (Raw)	Maximum Mark (Scaled)	Mean Mark (Scaled)	Standard Deviation (Scaled)
Unit 4- Information Systems within Organisations	90	90	45.9	12.6
Unit 5 - Information: Policy, Strategy and Systems	90	90	34.7	12.3
Unit 6 - The Use of Information Systems for Problem Solving	90	90	31.6	20.3

For units which contain only one component, scaled marks are the same as raw marks.

Unit 4 - Information Systems within Organisations (5378 candidates)

Grade	Max. mark	A	B	C	D	E
Scaled Boundary Mark	90	61	55	49	43	37
Uniform Boundary Mark	90	72	63	54	45	36

Unit 5 - Information: Policy, Strategy and Systems (1532 candidates)

Grade	Max. mark	A	B	C	D	E
Scaled Boundary Mark	90	51	45	39	34	29
Uniform Boundary Mark	90	72	63	54	45	36

Unit 6 - The Use of Information Systems for Problem Solving (61 candidates)

Grade	Max. mark	A	B	C	D	E
Scaled Boundary Mark	90	59	50	42	34	26
Uniform Boundary Mark	120	96	84	72	60	48

Advanced award

Provisional statistics for the award (109 candidates)

	A	B	C	D	E
Cumulative %	6.4	27.5	62.4	84.4	92.7

Definitions

Boundary Mark: the minimum (scaled) mark required by a candidate to qualify for a given grade.

Mean Mark: is the sum of all candidates' marks divided by the number of candidates. In order to compare mean marks for different components, the mean mark (scaled) should be expressed as a percentage of the maximum mark (scaled).

Standard Deviation: a measure of the spread of candidates' marks. In most components, approximately two-thirds of all candidates lie in a range of plus or minus one standard deviation from the mean, and approximately 95% of all candidates lie in a range of plus or minus two standard deviations from the mean. In order to compare the standard deviations for different components, the standard deviation (scaled) should be expressed as a percentage of the maximum mark (scaled).

Uniform Mark: a score on a standard scale which indicates a candidate's performance. The lowest uniform mark for grade A is always 80% of the maximum uniform mark for the unit, similarly grade B is 70%, grade C is 60%, grade D is 50% and grade E is 40%. A candidate's total scaled mark for each unit is converted to a uniform mark and the uniform marks for the units which count towards the AS or A-level qualification are added in order to determine the candidate's overall grade.