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Principal Examiner Feedback

Summer 2010

Applied GCE

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Information and Communication Technology (6957)

Paper 01 – Using Database Software

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General Comments

This was the first time the work was assessed on the updated version of the specification.

The evidence from this series seems to show that candidates were better aware of what to expect. It was unusual for candidates not to complete or at least attempt all 6 activities. However, some candidates failed to gain marks by not providing the correct evidence.

Despite instructions on the question paper, some candidates are still generating far too much paperwork for individual activities usually screenshots explaining how they had created forms and queries, not explaining how they functioned, and also how they had created reports.

The vast majority of candidates did show their report for Activity 5 in DESIGN view which was part of the rubric, to ensure the report was produced from the database.

It is important that candidates put their name, centre number and candidate number on reports otherwise they are unable to score any marks. It must be clear at the time of printing that the work belongs to the candidate.

Some candidates either crop screenshots too much – missing off names of tables, numbers of records on datasheets. This information is needed to award marks. Also some screen shots are small or of poor print quality making the evidence illegible.

Solution themes were apparent in the different centres and it appeared that some cohorts had too much specific advice between sessions. This too often leads to all candidates making the same mistakes and is not good practice.

There is evidence that candidates are being entered for this examination who have not been prepared sufficiently with database skills or for whom the specification is inappropriate.

Centres should note that there is no need to use SQL as this is a unit designed for DBMS. Candidates using SQL very often miss marks as the paper is not written with this in mind.

Candidates are still not assembling the folders correctly in the way required for the exam. Not having output correctly labelled or in the wrong order is considered to be not "creating an appropriate structure". Marks are awarded for Standard Ways of Working and students may lose these if their materials are not labelled or badly ordered.

Too many candidates were not awarded both the SWW marks because their script was incorrectly compiled. Many failed to complete the script correctly or added unnecessary (and sometimes blank) sheets also depriving them of SWW marks.

All printouts should be attached to the cover sheet via a single treasury tag to the hole available in the top left corner of the inside of the cover sheet as shown in the instructions. There should be no need to punch extra holes in the cover sheet and the treasury tag should be passed through the cover sheet and the printouts only once. The instructions are clear and the examiners would be grateful if centres could remind candidates to do this. Candidates should not include rejected work.

Double sided printing, whilst environmentally laudable, makes marking very difficult.

Candidates are still attempting to enter the header/footer by hand. This is not acceptable. It should be noted that, as in this series, in future series candidates work submitted without correct headers/footers will not be given the marks for that sheet as it is proof of authentication. Where headers/footers are missed it is generally on Activity 5.

A number of centres were late in posting off students' work. Centres need to ensure that work is sent off immediately after the exam has concluded.

QWC

This was assessed for the first time under the updated specification, The majority of centres commented on QWC on the e-sheet and used the criteria correctly. However some misunderstanding was evident in a few cases.

The rules for QWC are as follows:

- The content of the work is marked, identifying the band and the mark that the work is worth.
- The QWC is assessed and the mark is then adjusted, within the band, to give a final mark.
- The content mark cannot be increased on the basis of QWC.
- If the content mark awarded is at the bottom of a band, the student's mark cannot be reduced further.
- QWC should not be assessed elsewhere in the unit.

Activity 1

Candidates were asked to use a table format to give Processes together with the necessary Inputs and Outputs. Most candidates found this approach easy to use.

A wide range of responses were seen. Some candidates showed a good understanding and gained high marks. Weaker candidates often gave inappropriate rambling accounts in each section while others incorrectly described the process of creating the database components.

Most candidates identified "Book seat", "Add Customer", "Print Tickets" as these were not dissimilar to answers in previous series. Many simply answered in terms of how the database would be operated by a receptionist and simply transposed the bullet points from the scenario. Some candidates simply described what they were going to do. For example "I need to create a table for the customers". Such answers did not gain credit.

There was very clear guidance in the scenario about what the database should do but many candidates did not take advantage of this.

Too many candidates failed to gain marks for the processes or failed to evince clear outputs.

A particular example was a process of "VALIDATE LOG IN". Candidates were simply writing "LOG IN" which is not enough. They would often get the correct input but often did not get a correct output. A considerable number of candidates were unable to clearly identify the input/required data, and did not explicitly state the name of the table updated where appropriate.

The exact format of this question will vary from one series to another to cover all aspects of the specification.

Activity 2

There was a variety of solutions from different centres. Often candidates from the same centre created databases with very similar structures, as might be expected. However, where there were errors the same errors tended to be repeated throughout a centre.

It was good to note that candidates this time did not waste a lot of time showing normalisation and data dictionaries for the database.

One important piece of evidence for this strand is the screen dump showing the relationships.

The majority of candidates identified 3 or 4 appropriate tables with most relationships and imported the data accurately. However, there were still a few candidates who simply used the original tables, shown by names ending in _exam. Candidates need to normalise the data and not simply leave it in the format it given to them.

In the main, Data types and key fields were clearly identified although some candidates did miss out Boolean fields on Restricted View and Friend. Currency for Price was also missed, as was date for the date of booking.

Postcode validation/masking was done well, as was account number and telephone number. Many candidates recognised and used drop down boxes to display the choices of seat but did not seem to appreciate the need for 'limit to list' for combo boxes, or other validation for list boxes.

More candidates than in the past (but still a minority) picked up the need for some presence checks, as clearly signalled in the scenario, but often failed to show clearly that these had been applied to the specific fields. Most candidates were able to design sensible input masks but few used the required property for presence and even fewer used range checks. Presence checks on primary keys are not valid evidence to gain a mark. Several candidates applied lookup lists inappropriately on key fields.

Overall, many candidates managed to gain 3 or 4 of the extra validation marks available, with a reasonable number managing all the 4 available marks.

It was possible for candidates to achieve high marks for this activity whilst printing a small number of relevant pages. Weaker candidates are still providing a large number of disorganised pages showing little value. There are no marks for explaining how to

import records. It is enough simply to show clearly how many records have been imported.

Most candidates this time showed clearly how many records are in the various tables. Because of poor structure candidates often ended up with too many records in their tables.

Activity 3

This was better done than the equivalent section in previous series, with most candidates attempting if not all then at least 2 -3 parts of the activity. Candidates seemed to be able to demonstrate their skills more easily, following the structure of the activity.

The Customer form was not well produced, with most candidates using the automatic generator without amendment. The form for the new customer was rarely labelled as a New Customer Form and neither was the form to choose a specific performance well labelled e.g. with a simple title such as Find Performance. The interface to book seat and display cost was constantly created without evidence of discount, and 'Friend' on the form was nearly always ticked.

There was a wide range of responses to the booking system.

The query for searching for an existing customer was always attempted and often done well.

Candidates usually only evidenced one of the queries for empty seats with only a handful of candidates attempting to look for a specific performance either in the same query or a separate one.

The login screen was usually created; however, some candidates did neglect to label the screen as the login screen. The majority of candidates scored well in section E and it was apparent that centres had trained their candidates well in creating login systems. Most showed evidence of validation of both and of the password not viewable. Some candidates wasted time in doing tasks that were not required using over-complicated methods to validate the input. A few candidates used their own username and password, losing easy marks in the process.

Activity 4

Overall, the candidates generally did well on this activity of testing the functionality of the database though some candidates seemed to have difficulty understanding this activity and gained low marks. Most candidates obtained at least 4 marks. Many were able to get around 7 marks for this activity and a significant number of candidates gained full marks. However, some missed out on one or two marks because they failed to carry out the correct test. There was evidence of some candidates only attempting the first 2 parts of the activity.

Several candidates did not explain their testing and just produced a series of screenshots, often cropped to such an extent that the evidence was incomplete. Some candidates failed to gain marks because there was no evidence of the data being rejected or not stored when a further screenshot would have shown this as the

data they had created were clearly invalid. The idea of the candidate's own testing is to demonstrate the robustness of the database construction.

Very few seemed to answer 4 (a) (i). Many candidates managed to book a ticket for Amy Fleming but only the strongest candidates displayed the correct ticket price. Very few managed to provide a query (ies) to find free seat and/or performance date and time – usually one or the other, with the majority of candidates either not providing queries or using inappropriate criteria.

Angus Maughan's details were generally always added but a large number of candidates misspelled the name or the address "Turrett" generally having only one "t". Most provided evidence of the customer being added to booking system but some still had not managed to get the number above 1249. Many candidates did not show evidence of all details in the table.

Weaker candidates did not update the table from the booking form. These candidates then went on to attempt to type the records into the table shown either by the 'pencil' in the table or typing errors with the entry in the table being different to that shown on the form. Where there was evidence that candidates attempted to type the results into the table marks were not given.

Most candidates found it easy to input their own data; but some did not show it in the table. Quite a large number did not provide all the evidence of unsuccessful data. Stronger candidates did carry out good testing and were able to demonstrate where data could not be stored with well constructed error messages and good explanations.

Where candidates had achieved a working database with appropriate validation, they went on to score highly on this activity. It was pleasing to note that a good number of candidates got full marks.

Activity 5

Most candidates who had managed their time well got onto this activity and it was well answered. They had followed the rubric stated and, generally, there were fewer pages to deal with than on some previous occasions.

Most candidates presented a design view of the report to show they had used database software to generate it. Centres should note that no design view meant no marks could be awarded for the report.

Where this task was attempted, most candidates obtained at least 7 marks, with full marks not uncommon. Most had the name of the performance on all the tickets as required.

Most candidates managed to get the correct number of tickets and presented them as 4 o a page.

The stronger candidates identified the correct tickets and applied the appropriate discount allowing them to access fully the marks for A9, 10, and 11.

Activity 6

This activity was new to the specification to allow for the introduction of QWC. Overall, it was well accessed by those who attempted it with most candidates scoring some marks. Candidates tended to fall mainly into either Mark Band 1 or mark Band 3. There were a good range of marks awarded, with a small number gaining >6 marks.

The quality of language was generally very good with a significant number using technical terms appropriately.

As a general observation, candidates should note that evaluation involves judging the outcome against the original criteria, commenting on good and bad areas, and then making an overall judgment as to the effectiveness of the solution. It is not a bad evaluation that concludes a poor solution was created so long as this conclusion is justified.

In Mark Band 1 the evidence was that the majority of candidates did less well when they just described what they did without evaluating the performance of the database against the user requirements and therefore usually only achieved 3 marks. There was too much evidence of candidates stating what they had done wrong rather than concentrating on their achievements.

In Mark Band 2 there were some reasonable evaluations with candidates being able to show how their system was fit for purpose and to suggest sensible improvements. Many candidates dropped mark bands because their recommendations for improvements were often too basic or superficial.

In Mark Band 3 there were some really good answers where candidates really understood what was expected of them in the evaluation. They provided an excellent critique of how their database was fit for purpose; the functionality; the HCI and so high marks were awarded.

Unit Results

Grade	Maximum Mark	A	B	C	D	E	N
Boundary Mark	90	63	55	47	39	32	25
Max Uniform Mark	100	80	70	60	50	40	0-39

Candidates who do not achieve the standard required for a grade E will receive a uniform mark in the range of 0-39.

Note
Grade boundaries may vary from year to year and from subject to subject.

Qualification Results

Advanced Subsidary (Single Award)

The minimum uniform marks required for each grade:

Qualification Grade	A	B	C	D	E
Maximum Uniform Mark = 300	240	210	180	150	120

Candidates who do not achieve the standard required for a grade E will receive a uniform mark in the range of 0-119.

Advanced GCE (Single Award)
The minimum uniform marks required for each grade:

Qualification Grade	A	B	C	D	E
Maximum Uniform Mark = 600	480	420	360	300	240

Candidates who do not achieve the standard required for a grade E will receive a uniform mark in the range of 0-239.

Advanced Subsidary (Double Award)
The minimum uniform marks required for each grade:

Qualification Grade	AA	AB	BB	BC	CC	CD	DD	DE	EE
Maximum Uniform Mark = 600	480	450	420	390	360	330	300	270	240

Candidates who do not achieve the standard required for a grade EE will receive a uniform mark in the range of 0-239.

Advanced GCE with Advanced Subsidary (Additional)
The minimum uniform marks required for each grade:

Qualification Grade	AA	AB	BB	BC	CC	CD	DD	DE	EE
Maximum Uniform Mark = 900	720	690	630	600	540	510	450	420	360

Candidates who do not achieve the standard required for a grade EE will receive a uniform mark in the range of 0-359.

Advanced GCE (Double Award)
The minimum uniform marks required for each grade:

Qualification Grade	AA	AB	BB	BC	CC	CD	DD	DE	EE
Maximum Uniform Mark = 1200	960	900	840	780	720	660	600	540	480

Candidates who do not achieve the standard required for a grade EE will receive a uniform mark in the range of 0-479

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