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Moderators' Report/ Principal Moderator Feedback

Summer 2016

Pearson Edexcel GCE In Applied ICT (6957) Paper 01 Using Database Software

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General Comments

It was pleasing to see that the majority of students took into account the clear instructions in the examination paper with regards to the ordering of evidence and the printouts required. It is understandable that some students may need to produce more than the minimum prints required in activity 3 but the best advice, as shown by many students, is keep to the task specified and keep it simple.

It is apparent that a lot of students are taking on board comments made in previous reports with regards to marks that are lost because of poor screenshots with the majority ensuring screenshots were clear. However, there are still some who either crop screenshots too much – missing off names of tables, numbers of records on datasheets, truncating macro screenshots etc, and of printing them out too small or with poor print quality making the evidence illegible.

It is probably worthwhile reiterating here what is deemed acceptable with regards to help and assistance before and during the exam period. The teacher's job is to prepare the students for the exam by developing the technical skills necessary to create a database at this level. The scenario is released prior to the examination. Teachers are allowed and encouraged to discuss with their students possible answers to the questions. The scenario had very clear tasks in order to aid this process. At this point the teacher does not know the final construction of the dataset so that any datasets they give to their students for practice can only be guesswork.

Once the teacher becomes aware of what is in the live data files they should no longer discuss the examination in context although they are allowed to discuss with the students aspects of databases in general terms.

For example they can revise the generation of primary keys as long as the examination data files are not used as an example. The data file(s) in any examination contain data that the students have to accept as being the way we want it. It is up to them how they cope with any anomalies that may be present. This is true of any 'live' situation in the real world where they would have to make their own decisions about how to proceed. Students are not required to create any new fields, they should use all and only what they have been given.

Administration

On the whole administration is sound but there are still some students losing one or two standard ways of working marks in the paper by not assembling the tasks in the correct order or, where they are in the correct order, attaching them to the answer booklet incorrectly. When the examiner opens the booklet they should be greeted with activity 1 facing toward them ready to mark; this is not always the case ie when the examiner opens the booklet they are faced with the back of the activity 6 or the work hole punched in the right-hand corner as opposed to left. This adds to the time taken to mark an examination paper. Very few students do

not ensure their name, centre number etc is present on every print though it does still occur.

Activity 1

It was expected that this question would be well answered and it was pleasing to see that, in many instances, it was. However, there were quite a few students who achieved very few of the marks.

Part A required the students to identify what was missing from the data flow diagram. Where marks were lost here it was usually due to the wording not being specific enough.

Part B expected the students to explain why data flow diagrams are useful during the design process. There were some excellent answers provided tailored well to the scenario. In other cases, the students provided to repeat themselves whilst answering the question or explanations given were too vague.

Activity 2

On the whole this question was well answered.

A lot of students managed to pick up all the marks for Part A with tables for establishment, teacher, act, performer, round and votes. However, in some instances students seemed to try to force the solution to involve only the use of four tables when, quite clearly, normalisation to third normal form would be violated.

For Part B most students picked up the marks for the single primary keys and a lot for the composite key which was nice to see. However, there are still instances of students not enforcing referential integrity and using too many fields within a composite key when the extra fields are not required in order to ensure each record is unique. The majority of students achieved the mark for using correct data types.

Part C showed very good use of validation with regards to the pattern for the email address. It was pleasing to see how many different methods were used here. Most students achieved a mark for using a suitable presence check, however, there are still students applying a presence check to primary keys which is not required. Most students also achieved the mark for using a table lookup on a foreign key. Where the mark was lost it tended to be because the student had not used it on a foreign key or had not ensured limit to list was set to yes.

Part D if marks were lost here it was generally down to either the use of incorrect tables or not ensuing the number of records could be clearly seen.

Activity 3

Activity 3 is all about the design view aspects of building the forms and generating the processes. Students should be discouraged from including screenshots showing the system in use as that is explicitly tested in Activity 4 and can detract from the evidence required in Activity 3. Where activity 3 had been attempted all students built the teacher form.

Part A was generally well evidenced with a range of methods used to ensure the TeacherID was correct. It was also nice to see how many different methods were used to ensure the key would have leading zeros.

Part B was also well evidenced on the whole. When marks were lost it was usually down to the examiner not being able to determine that the record would save. For example, students using an autonumber but not providing evidence showing this, students using the save method in code but not showing how the generated number for TeacherID would be assigned to the primary key or students truncating the append query so that all of the information could not be seen. The examiner must be confident the value of the new primary key would be appended to the table.

Part C the majority of students did create a menu and ensure the button clearly identified what it was to do and that it did not require a new form in order to generate and append the new round details. Most ensured parameters were used where indicated. However, some students produced an input form rather than a menu and missed out using parameters altogether. It was pleasing to see how many students correctly generated and appended the new round details and how many different methods were used to do this. Students are still losing marks for truncating queries here though. Most students had attempted to generate and append the new vote records for round three with varying degrees of success. Marks tended to be lost here if the students had not clearly shown how the current round was found and how the new round was generated. It was nice to see how many students ensured a subform was not used and all of the voting records were present on the one form. Some students had clearly shown how the form filtered to round 3. Others missed the mark by omitting this.

Overall, it was exceedingly encouraging to see how well this activity was attempted and the many different methods of achieving what was required. The only downside really is that some students still do not realise that if they want the marks on offer they must ensure the examiner can clearly see the evidence. It is worthwhile asking themselves the question – 'if I did not know how this had been done, would I be able to work it out from the screenshots I have provided?' - This does not mean lots of annotations / screenshots have to be present. Indeed, we try to guide the students into the screenshots we want. However, if what we have asked for does not fully show what they have done they should include more. Students should keep in mind: have I included all of my queries, have I included evidence of every part of formulae used, are my query columns wide enough, are my screenshots clear to see etc.

Activity 4

Overall, the students did well on this activity with many achieving full marks.

Parts A and B were very well evidenced. Part C less so. Where students had not ensured all records were on one form, most did not show the input of the votes for all of the records so accuracy could not be determined. The examiners must be able to match what has been appended to the table(s) to what has been input. In some cases, students did not evidence the appending of the new records to the round table and only provided evidence of the appending of the results.

Activity 5

This activity was well attempted and evidenced on the whole with quite a lot of students achieving full marks.

Part A most students ensured the query was not truncated and that all criteria etc could be seen. It was nice to see the different methods used to ensure only the top three acts would be found though some students did not clearly evidence this.

Part B expected the students to take into account that calculations were generated, e.g. an automatic method used to determine there were 19 votes rather than the student physically using 19 in the calculation. There were some excellent methods used to determine the final places and the percentage of votes received. This was really encouraging to see. Where marks were lost here it tended to be because students had not attempted the calculations or had not clearly shown the calculations. Most students did take into account that the percentage was to be shown to 1 decimal place and with a % sign.

Activity 6

It was reassuring to see that the majority of students had taken note of what was asked of them in the examination paper and carefully ensured their evaluation reflected this with some excellent, well thought evaluations raising some very good points about future functionality. However, others still see it as an opportunity to talk about how well they have completed the examination questions or give a running commentary of what they did to build it. Please stress to students that we do not want to see screenshots of how they have built aspects. We have already seen that in activity 3 and students can waste a lot of valuable time doing this.

Grade Boundaries

Grade boundaries for this, and all other papers, can be found on the website on this link:
http://www.edexcel.com/iwantto/Pages/grade-boundaries.aspx

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