## APPLIED ICT

Paper 9713/11
Written A 11

## General comments

It was encouraging that there were a larger number of candidates, than had been the case in previous sessions, who appeared to have been well prepared for this assessment; however, there are still a large number who were not.

There were a number of candidates who clearly lacked the ability to perform well at this level.
It is still common to find candidates rote learning answers from past papers. This was particularly evident when, although questions might relate to a similar topic, the scenarios had changed markedly. In this paper, as with any exam paper at this standard, candidates are required to show a level of understanding as well as a depth of knowledge. As has been highlighted in previous reports, this cannot be achieved by simply repeating bullet points from previous mark schemes. The points listed on mark schemes are often a summary of the knowledge required to answer the question and should not be interpreted as an answer in itself. Candidates are required, in 'discuss' and 'explain' questions, to expand on the bullet points given in the mark scheme not just repeat them; they need to show an understanding of the scenario.

## Comments on specific questions

## Question 1

Many candidates did quite well on this question
(a) Several candidates answered this correctly but a number referred to hardware that would be needed or personal circumstances rather than the personal characteristics required.
(b) Most candidates were able to name items of hardware but were frequently unable to describe the devices adequately. The scenario referred to the translation of documents so it was surprising to see a number of candidates failing to refer to documents in their answer.

## Question 2

This question was surprisingly not well answered.
(a) This was answered better than part (b) but, again, it seemed that many candidates were able to name the devices but were unable to describe them in any detail or failed to describe them at all. Some gave software answers but the main fault was the lack of precision in the description with answers such as 'microphones let you hear someone' when in fact it is speakers that let you hear. Another common answer was that 'webcams let you see someone' when of course it is monitors that enable you to see the other participants. Microphones and webcams are after all input devices.
(b) Most candidates were unable to provide good reasons with again very general answers such as 'video conferencing lets you see them'. The mention of price was rarely expanded upon.

## Question 3

This question was quite well answered except for part (d).
(a) Candidates' knowledge of time management has improved markedly with many candidates scoring quite well on this question.
(b) This was quite well answered but a number of candidates named software packages rather than using the generic terms. Centres are reminded of the statement at the bottom of page 4 of the syllabus.
(c) This was also quite well answered but there were a number of points which candidates appeared unsure about, including cost. Many said it was cheaper without giving the reason why.
(d) This was not very well answered. A lot of candidates referred to speed and cost but without saying for what. Many candidates just described what a flyer is and thereby failed to answer the question.

## Question 4

This question was not well answered with the majority of candidates failing to gain many marks.
(a) Candidates often just described the process of online shopping without giving the features of a well designed shopping website. A number described the features of a well designed website without referring to online shopping whilst others described a typical online shopping website without considering whether it constituted being well designed.
(b) This question was misinterpreted by a number of candidates who gave answers relating to the combatting of the issues rather than what they were.
(c) Many candidates only really mentioned hacking and failed to mention other concerns that that customers might have. Many discussed the advantages and disadvantages of online shopping in general. A number referred to methods which are more related to online banking than online shopping.

## Question 5

This question was generally answered well with the exception of part (a).
(a) Most candidates made one or two good points but few gained high marks. Candidates seemed to have a reasonable overview but were unable to give many specific features.
(b) This part of the question was quite well answered with many candidates giving correct full answers. A number, however, were too vague tending to give answers which lacked the detail required.
(c) This part of the question caused a number of problems for candidates. It was apparent that candidates had learnt off by heart a number of responses to past paper questions. They gave answers related to working patterns one might observe in an industry where the role of the worker had changed markedly. In this scenario it had not. Only the hours worked had changed.

## Question 6

Candidates generally struggled with this question.
(a) The answers provided were generally vague descriptions with little reference to teachers and the school. It is surprising to see that despite teachers being the focal point of this scenario as being the 'system users' candidates often referred to 'workers' or 'employees' thereby implying that everybody would be interviewed or given questionnaires rather than the staff concerned. Some candidates were able to answer the question well.
(b) Candidates were able to score highly on the part of the question which asked for items of design but, despite being told in the question to refer to the scenario, candidates frequently gave general answers not related specifically to the scenario when explaining the factors.

## Question 7

This question was answered in a variable manner with some quite diverging scores.
(a) This was the part of the question which most candidates found straightforward with many scoring high marks.
(b) This part of the question enabled candidates to score some marks with many getting quite high marks. It was, however, the question which was left unanswered by a substantial number of candidates.
(c) Candidates found this the hardest question on the paper. Many were unable to visualise what a test plan would look like and instead concentrated on answering as if this was a question about types of test data with descriptions of normal/live and abnormal/extreme data.

Paper 9713/12
Written A 12

## General comments

It was encouraging that there were a larger number of candidates, than had been the case in previous sessions, who appeared to have been well prepared for this assessment; however, there are still a large number who were not.

There were a number of candidates who clearly lacked the ability to perform well at this level.
It is still common to find candidates rote learning answers from past papers. This was particularly evident when, although questions might relate to a similar topic, the scenarios had changed markedly. In this paper, as with any exam paper at this standard, candidates are required to show a level of understanding as well as a depth of knowledge. As has been highlighted in previous reports, this cannot be achieved by simply repeating bullet points from previous mark schemes. The points listed on mark schemes are often a summary of the knowledge required to answer the question and should not be interpreted as an answer in itself. Candidates are required, in 'discuss' and 'explain' questions, to expand on the bullet points given in the mark scheme not just repeat them. They need to show an understanding of the scenario. Centres are reminded that this is 'Applied ICT' and candidates are expected apply their knowledge to the context of the scenario. It is important for candidates to realise that they need to refer back to the scenario when answering questions. For example, in Question 5b the scenario referred to changing the hours of work so that operators would work fewer hours yet a number of candidates wrote about unemployment in general and greater employment for technical workers.

## Comments on specific questions

## Question 1

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(a) Several candidates answered this correctly but a number referred to hardware that would be needed or personal circumstances rather than the personal characteristics required.
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(a) This was answered better than part $\mathbf{b}$ but, again, it seemed that many candidates were able to name the devices but were unable to describe them in any detail or failed to describe them at all. Some gave software answers but the main fault was the lack of precision in the description with answers such as 'microphones let you hear someone' when in fact it is speakers that let you hear. Another common answer was that 'webcams let you see someone' when of course it is monitors that enable you to see the other participants. Microphones and webcams are after all input devices.
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## APPLIED ICT

Paper 9713/13
Written A 13

## General comments

There were a number of candidates who clearly lacked the ability to perform well at this level.
It is still common to find candidates rote learning answers from past papers. This was particularly evident when, although questions might relate to a similar topic, the scenarios had changed markedly. In this paper, as with any exam paper at this standard, candidates are required to show a level of understanding as well as a depth of knowledge. As has been highlighted in previous reports, this cannot be achieved by simply repeating bullet points from previous mark schemes. The points listed on mark schemes are often a summary of the knowledge required to answer the question and should not be interpreted as an answer in itself. Candidates are required, in 'discuss' and 'explain' questions, to expand on the bullet points given in the mark scheme not just repeat them; they need to show an understanding of the scenario. For example, in Question 5b the scenario referred to changing the hours of work so that operators would work fewer hours yet a number of candidates wrote about unemployment in general and greater employment for technical workers.

## Comments on specific questions

## Question 1

Many candidates did reasonably well on this question
(a) Most candidates gained some marks although they often failed to say how each item might be used.
(b) Most candidates were able to name pieces of medical information but it was surprising to see how many candidates referred to personal information such as name and address rather than medical information.

## Question 2

This question was very well answered with most candidates gaining high marks for descriptions of video conferencing, phone conferencing as well as the use of mobile phones.

## Question 3

This question was reasonably well answered.
(a) Candidates' responses tended to concentrate on just one or two items of hardware and were thereby unable to do themselves justice. A number described software items rather than hardware.
(b) This was quite well answered on the whole but a number of candidates appeared to have little knowledge of the topic. Candidates tended to score highly or not at all.
(c) This was not as well answered as expected. A number of candidates described methods which were not relevant to the scenario as it required candidates to describe methods that the company would use to produce their own materials.

## Question 4

This question was not well answered with the majority of candidates failing to gain many marks.
(a) Candidates showed little understanding of the payroll process. Their answers, in the main, concerned the production of a payslip with few alternatives.
(b) This question was badly answered. Many concentrated on the security of the site and the associated precautions without mentioning the other features required.
(c) Candidates rarely went into sufficient detail regarding their answers and mainly wrote about passwords and encryption without discussing the efficacy of these or other methods.

## Question 5

This question was generally well answered.
(a) Most candidates made good points and many scored high marks.
(b) This part of the question was very well answered with many candidates giving fully correct or nearly fully correct answers.

## Question 6

Candidates generally struggled with this question.
(a) There seemed to be a lack of knowledge regarding this topic. A number of candidates were unable to answer the question preferring instead to assume the Analysis section had been completed and wrote about design instead.
(b) Candidates were not able to score well on this part of the question, which asked for validation checks regarding a 12 digit candidate ID number, giving generalised answers without going into detail regarding the ID number.

## Question 7

This question was answered in a variable manner with some quite diverging scores.
(a) This part of the question elicited the weakest responses of the whole paper with very few candidates appearing to know what live data is.
(b) This part of the question was much better answered with marks being gained by most candidates. Quite a number of candidates gained marks for describing the methods but failed to extend their scores by comparing the methods.
(c) Candidates found this a difficult question to answer. Many just described evaluation without describing the methods an analyst might use to see how easy the system is to use.

## Question 8

This question was also badly answered with most candidates unable to go into any detail about how assessment is carried out using computers. A sizeable number of candidates did not attempt the question and many wrote just one or two lines.

## APPLIED ICT

Paper 9713/02
Practical Test A

## General comments

The majority of candidates completed all elements of the paper. There were vast differences in the range of results from Centre to Centre and from candidate to candidate within Centres. The paper gave a good spread of marks. Candidate errors were spread evenly over the sections of the paper, although the application of candidates' knowledge to produce a report on 'accurate and error free documents' caused a number of candidates some problems.

A very small number of candidates failed to print their name, Centre number and candidate number on some of the documents submitted for assessment. Without clear printed evidence of the author of the work, Examiners were unable to award any marks for these pages. It is not acceptable for candidates to annotate their printouts by hand with their name as there is no real evidence that they are the originators of the work.

Several candidates omitted one or more of the pages from the required printouts. Some partially completed the database task or submitted either the formulae view, or the values view of the spreadsheet rather than both views. A small number of candidates submitted multiple printouts for some of the tasks and failed to cross out those printouts that were draft copies. If multiple printouts are submitted, Examiners will only mark the first occurrence of each page.

A small number of candidates misinterpreted the word report in the question paper. This does not refer to a report generated using a database but refers to a document produced for another person/audience to view. The use of a database may in some cases be the most appropriate tool for generating a report, but in Question 30, it may not.

The word processing task gave some problems for candidates. While most demonstrated sound practical skills some failed to attain many marks on the knowledge and understanding required for this paper. Despite an instruction to 'explain in your own words' a significant number of candidates copied blocks of text directly from the Internet. Examiners will give no credit for sections of text copied and pasted from the Internet.

Overall the paper performed very well.

## Comments on specific questions

## Questions 2 and 3

This section was performed well by many candidates. The majority of candidates created the database tables correctly and used appropriate field names. Few managed to set all the data types in the Cars table into their most effective and efficient field types. A significant number of candidates did not use currency format for the Sales and Purchase Price fields. Some candidates set the Year field to text rather than numeric and even fewer candidates set the Sold field as boolean or the Date Sold field as a date field type. A number of candidates erroneously set the telephone field in the customer table as a numeric field. The relationship was generally created between the correct fields and where evidenced was set as one-to-many relationship. A number of candidates did not print detailed evidence of the relationships, either showing the fieldnames at both ends of the relationship (if a relationship diagram was used as evidence), or failed to show the one-to-many settings. Where Centres are using open source software for this type of question, it is important that screen shots that are presented to show the evidence of validation rules and validation error messages clearly show which field/s they relate to.

# Cambridge International Advanced and Advanced Subsidiary Level <br> 9713 Applied ICT June 2010 <br> Principal Examiner Report for Teachers 

## Question 4

Most candidates attempted this question, many performing well, but few attained full marks. A significant number of errors were made in differentiating between greater than or greater than or equals to. Few candidates used appropriate messages for the validation rules, with a significant number adding no validation messages to some or all of the fields. For the customer ID field it was appropriate to use an input mask to restrict data entry as well as a validation rule. Some of the most able candidates included this in their submissions and also set the controls for both tables. The use of an input mask also provided a sound solution to validating the customer's telephone number, ensuring that only the correct number of numeric digits and the appropriate space would be included in the data entry.

## Question 5

A small number of candidates did not complete this step, the majority did calculate the profit for each vehicle sold, and most of these candidates also obtained the correct total at the bottom of the profit column. The most significant errors in this question were typographical in the report title, or the failure to search using two criteria, often searching for the cars sold but omitting the search for the business customers. A significant number of candidates also set the currency values to their software's default settings, rather than in sterling as specified in the question. The only other error common to a significant number of candidates was the omission of the sorting into the order of the date the vehicle was sold. This may sometimes have been as a consequence of an incorrect data type being assigned to this field.

## Questions 6 and 7

This was not performed well by the majority of candidates. A significant number of candidates did not calculate the correct values for the average sales price of each make. Examiners allowed follow through marks for the searching element of this question. There were a number of typographical errors, including case errors and spelling errors in the title.

## Question 8

This graph question was performed considerably better in this session than those seen in previous sessions. The majority of candidates selected the correct chart type, and generated a bar chart showing the correct data and, for the most part, correct labels. The most significant error was in the chart title, where a number of candidates produced titles which did not explain in full the data displayed. This included the use of SMS text 'language' and other similar abbreviations. A significant number of candidates included the total data as a discrete bar within the chart. This was not required.

## Question 9

This question appeared to cause more problems for candidates than any other section of the paper. Candidates were expected to calculate the average profit for cars sold to business and personal customers. Many failed to calculate these values, either using grouping, summary data in the interrogation (query) or by exporting into a spreadsheet to perform the calculation. A small number of candidates generated the correct values for these two figures but did not format the controls (or cells) into pounds sterling with 2 decimal places to match the stored data. Some generated the averages but did not include full descriptions of the data to identify in full the two types of customer, either through the use of a key or by editing the appropriate controls or labels.

## Questions 10 to 12

These questions were completed well by the vast majority of candidates. Few errors were discovered, although a small number of candidates did not use the most efficient function to sum the total number of properties in the region. Although repetitive addition of cells individually addressed works, at A Level, there is an expectation that candidates should be able to select and implement the most appropriate methods to solve the tasks set.

## Question 13

This lookup was well attempted by the majority of candidates. In a small number of cases there were issues in the use of absolute and relative referencing so that the first function could be successfully replicated.

## Question 14

This question was omitted by a significant number of candidates. Many candidates who did attempt this came up with creative and innovative solutions to the task. Few candidates from the vast majority of Centres attempted this task in the same way. Examples included having individual lookups within nested IF statements; or a single lookup with nested IFs to control the column placement in the array. This question gave some candidates a number of problems, yet a significant number managed to attain correct solutions.

## Question 15

This question was generally well done by the majority of candidates. A few used incorrect references for the two variables, both in terms of the correct columns and in some cases for the correct rows.

## Question 16

This question was generally well done by the majority of candidates. Again there were a few errors when referencing the correct cells.

## Question 17

This was not well done by a large number of candidates. Many replicated the formulae for an extra row, including row 21 which contained no area data, but contained the total number of properties in total.

## Question 18

Where candidates had replicated the formulae down to row 21 , a number of them placed the total cost of deliveries in cell F22 and included the extra row, creating an error in the calculation for the total cost of the deliveries.

## Question 19

This question was very well done by the majority of candidates.

## Question 20

This question was very well done by the majority of candidates, although a small number included the candidate details in the header or on the sheet itself.

## Question 21

This question caused a number of candidates some problems. Candidates appeared to be well prepared for the creation of the spreadsheet task, but few appeared to have used a spreadsheet to model outcomes and many did not attain the mark for this element. Several candidates omitted the printout of the values.

## Question 22

A significant number of candidates failed to get full marks for this question, some failing to generate the formulae printout. Other candidates printed the formulae but ignored the instruction to ensure that all formulae and labels are fully visible. It was surprising that a significant number of candidates lost quite a few marks by failing to show the Examiner the formulae they had entered within their solution.

## Question 23

This question caused some candidates problems. Most demonstrated sound practical word processing skills, but marks were only awarded for this section to candidates who had produced more that 100 words. Despite the question specifying between 100 and 400 words, a number of candidates submitted far more than this, much copied and pasted from the Internet. In the question it specified 'in your own words' which means that any text copied from any source would not be acceptable as an answer. Materials copied from the Internet were often not relevant to the garage scenario and would have needed to be edited to be made relevant. The question was carefully chosen so that the answers did not readily appear in any search on the Internet or of specific packages help files. Candidates who produced work copied directly from any source will not be credited with any marks on questions of this nature. It was acceptable for candidates to do the research and paraphrase their results to answer the question. Good answers included a range of responses
outlining what the terms 'document for publishing', 'accurate' (in this context) and 'error free' (also in this context) mean to the manager. Good answers then went on to explain how accurate and error free documents could be attained through verification and both automated and manual methods. Marks were also awarded for a range of other tools used to assist in this process.

## APPLIED ICT

Paper 9713/31
Written B 31

## General comments

It was good to see more candidates showing better understanding of the questions in this paper. With several past papers and the new text book as resources some Centres are teaching their candidate to provide good answers. More candidates showed a good understanding of the subject this session than any previous sessions- well done teachers. However, there were other Centres where candidates scored really low marks as they appear not to have been prepared for this examination. Applied ICT really does required good teaching and preparation so that candidates can apply their knowledge. The questions were similar to IGCSE ones yet too often candidates were unable to provide answers at this level let alone A2.

The language used by candidates was good and caused no concern to marking the scripts. A few candidates left sections blank which is not good examination technique. Candidates need to remember that the scripts will be scanned and entered for on screen marking. Therefore if they write an answer anywhere other than the correct section they must tell the Examiner where their answer can be found. Also they really must not use correcting fluid as clearly set out on the front cover of the examination paper. By writing over this the handwriting becomes impossible to read in some cases and the response could not be deciphered, even when viewed at $200 \%$, so marks might have been lost.

The usual comment applies about not learning generic answers by rote but applying them to the given scenario. Those candidates who had been given this advice tended to score better marks.

## Comments on specific questions

## Question 1

This question uses a topic that most candidates should understand and it was well answered in most cases.
(a) This section concerns the three items of information on a passport.

There were 14 possible answers to obtain marks and candidates usually understood which ones were sensible. Centres should emphasise that criminal records are not stored on a passport- a separate, secure database is used with the passport number as the key field. Ethnic group is also not recorded on most passports and was not accepted. Addresses are not used as they can change from time to time.
(b) This question caused some confusion. The Examiners were looking for electronic elements in a passport. These were RFID and a chip. Very few candidates gave these 2 answers- the key word being electronic. Too many answers were about barcodes, magnetic stripes and even MICR. A magnetic stripe does not hold biometric details. A bar code holds just an ID number and check digit yet they were given as holding biometric details.
(c) This question was about the advantages of electronic passports over paper based ones. Too many candidates did not understand that an electronic passport is a physical device with electronic elements- it is not a soft copy held in a database.
(d) The use of fingerprints to control and monitor access around an airport was badly understood. The 7 marking points offer guidance about the level of detail required to earn marks in this question that relied on common sense as much as subject knowledge.

## Question 2

This question was more difficult than the previous one as few candidates not be aware of e-tickets and eticket kiosks.
(a) There were 5 marking points for the 3 marks and most candidates scored 2. The barcode on an eticket is simply an ID number- it may be derived from passport number and/or credit card number. It does not hold any large volume of data as some candidates suggested in their answers.
(b) This was a question where candidates scored marks as they found it an easy question to understand.

## Question 3

This was an easy question for those candidates who had used an e-ticket kiosk. Those who had not experienced a kiosk were not at a disadvantage, as they use standard ICT features. Most scored well on this question. Interesting how many answers were given about users not having an argument with a kiosk unlike human desk clerks.
(a) This section covered the advantages and was well answered. Candidates must note for whom the advantages are applicable- in this case it is the passenger not the company.
(b) This section was not well answered unlike the previous section. Candidates immediately thought of hacking. In real life this would only happen if the terminals used wi-fi to link to the server. The use of other devices is unlikely- apart from skimmers. The kiosks are dedicated to only provide services for e-tickets. They may well not allow www access as many candidates thought and then went on to give generic answers to security from surfing.

## Question 4

This question is leads on from IGCSE ICT and candidates really should be familiar with the concept of setting up a knowledge based expert system. They were required to provide more specific answers than at IGCSE and many failed. It was good to see some candidates reaching an A2 standard.
(a) Design and installation only to earn marks
(b) Very few answers showed understanding of the need for an editor to update a knowledge base.

## Question 5

This proved a popular question and many Centres had taught these terms and their candidates scored well.

## Question 6

Candidates should be used to control questions from IGCSE ICT. It was worrying how few candidates understood the concept of an acceptable range rather than a specific reference value. The use of ADC was good but few understood the use of actuators.

Centres need to ensure that the candidates understand that a sensor does not decide what to do it, simply inputs data into a microprocessor via an ADC.

## Question 7

Again this question leads on from IGCSE ICT; the Examiners require a higher level of detail as set out in past papers. Thanks must go to those Centres that had taken note and taught their candidates the difference between a laptop using the Internet and a global multi-national using dedicated suites.
(a) This section was about the hardware and a good number of candidates gave answers about software. Most scored 3 or more marks
(b) This section proved more difficult for the candidates and provided good discrimination.
(c) A popular question with candidates able to show that they understood the difference between these two applications that hey probably have experienced.

## Question 8

This topic has been asked before and a good number of candidates had learned the subject.
(a) The emphasis was on the relative size of MP3 files and the growth of broadband influencing demand.
(b) A good question for the majority of candidates who seemed to have good subject knowledge on the topic. A satellite dish cannot transmit to a transponder in space. The LNB is a passive device.
(c) An easy question for most candidates to obtain 3 marks.

## Question 9

This question was set to see if candidates understood how ICT was applied to mark their papers.
(a) The question specifically mentioned written papers and therefore OMR of multiple choice papers was not accepted. Several answers mentioned typing in hand written responses, this was incorrect. The written papers are scanned in as an image- a few candidates understood this feature. They do not use OCR to create a word processor file as many candidates thought. The efficiency of a very good OCR system is $95 \%$ and nowhere fast enough for exam marking.
(b) No responses from some candidates about the advances in ICT.

## Question 10

This question required candidates to understand that in the past exam papers had been marked at home and that this on screen was marking was not new. Several candidates mentioned tele-working, this was not correct. The health and the safety points were equivalent to IGCSE ICT and therefore many marks were gained by candidates. With only 5 marks, candidates did not have to provide more than one example of each. Far better to just provide more detail of one feature is very good advice for teachers to offer their candidates.

Paper 9713/32
Written B 32

## General comments

It was good to see more candidates showing better understanding of the questions in this paper. With several past papers and the new text book as resources some Centres are teaching their candidate to provide good answers. More candidates showed a good understanding of the subject this session than any previous sessions- well done teachers. However, there were other Centres where candidates scored really low marks as they appear not to have been prepared for this examination. Applied ICT really does require good teaching and preparation so that candidates can apply their knowledge. The questions were similar to IGCSE ones yet too often candidates were unable to provide answers at this level.

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There were 14 possible answers to obtain marks and candidates usually understood which ones were sensible. Centres should emphasise that criminal records are not stored on a passport- a separate, secure database is used with the passport number as the key field. Ethnic group is also not recorded on most passports and was not accepted. Addresses are not used as they can change from time to time.
(b) This question caused some confusion. The Examiners were looking for electronic elements in a passport. These were RFID and a chip. Very few candidates gave these 2 answers- the key word being electronic. Too many answers were about barcodes, magnetic stripes and even MICR. A magnetic stripe does not hold biometric details. A bar code holds just an ID number and check digit yet they were given as holding biometric details.
(c) This question was about the advantages of electronic passports over paper based ones. Too many candidates did not understand that an electronic passport is a physical device with electronic elements- it is not a soft copy held in a database.
(d) The use of fingerprints to control and monitor access around an airport was badly understood. The 7 marking points offer guidance about the level of detail required to earn marks in this question that relied on common sense as much as subject knowledge.

## Question 2

This question was more difficult than the previous one as few candidates may not be aware of e-tickets.
(a) There were 5 marking points for the 3 marks and most candidates scored 2. The barcode on an eticket is simply an ID number- it may be derived from passport number and/or credit card number. It does not hold any large volume of data as some candidates suggested in their answers.
(b) This was a question where candidates scored marks as they found it an easy question to understand.

## Question 3

This was an easy question for those candidates who had used an e-ticket kiosk. Those who had not experienced a kiosk were not at a disadvantage, as they use standard ICT features. Most scored well on this question. Interesting how many answers were given about users not having an argument with a kiosk unlike human desk clerks.
(a) This section covered the advantages and was well answered. Candidates must note for whom the advantages are applicable- in this case it is the passenger not the company.
(b) This section was not well answered unlike the previous section. Candidates immediately thought of hacking. In real life this would only happen if the terminals used wi-fi to link to the server. The use of other devices is unlikely- apart from skimmers. The kiosks are dedicated to only provide services for e-tickets. They may well not allow www access as many candidates thought and then went on to give generic answers to security from surfing.

## Question 4

This question is leads on from IGCSE ICT and candidates really should be familiar with the concept of setting up a knowledge based expert system. They were required to provide more specific answers than at IGCSE and many failed. It was good to see some candidates reaching an A2 standard.
(a) Design and installation only to earn marks
(b) Very few answers showed understanding of the need for an editor to update a knowledge base.

## Question 5

This proved a popular question and many Centres had taught these terms and their candidates scored well.

## Question 6

Candidates should be used to control questions from IGCSE ICT. It was worrying how few candidates understood the concept of an acceptable range rather than a specific reference value. The use of ADC was good but few understood the use of actuators.

Centres need to ensure that the candidates understand that a sensor does not decide what to do it, simply inputs data into a microprocessor via an ADC.

## Question 7

Again this question leads on from IGCSE ICT; the Examiners require a higher level of detail as set out in past papers. Thanks must go to those Centres that had taken note and taught their candidates the difference between a laptop using the Internet and a global multi-national using dedicated suites.
(a) This section was about the hardware and a good number of candidates gave answers about software. Most scored 3 or more marks
(b) This section proved more difficult for the candidates and provided good discrimination.
(c) A popular question with candidates able to show that they understood the difference between these two applications that hey probably have experienced.

## Question 8

This topic has been asked before and a good number of candidates had learned the subject.
(a) The emphasis was on the relative size of MP3 files and the growth of broadband influencing demand.
(b) A good question for the majority of candidates who seemed to have good subject knowledge on the topic. A satellite dish cannot transmit to a transponder in space. The LNB is a passive device.
(c) An easy question for most candidates to obtain 3 marks.

## Question 9

This question was set to see if candidates understood how ICT was applied to mark their papers.
(a) The question specifically mentioned written papers and therefore OMR of multiple choice papers was not accepted. Several answers mentioned typing in hand-written responses, this was incorrect. The written papers are scanned in as an image- a few candidates understood this feature. They do not use OCR to create a word processor file as many candidates thought. The efficiency of a very good OCR system is $95 \%$ and nowhere fast enough for exam marking.
(b) No responses from some candidates about the advances in ICT.

## Question 10

This question required candidates to understand that in the past exam papers had been marked at home and that on-screen was marking was not new. Several candidates mentioned tele-working, this was not correct. The health and the safety points were equivalent to IGCSE ICT and therefore many marks were gained by candidates. With only 5 marks, candidates did not have to provide more than one example of each. Far better to just provide more detail of one feature is very good advice for teachers to offer their candidates.

Paper 9713/33
Written B 33

## General comments

It was good to see more candidates showing better understanding of the questions in this paper. With several past papers and the new text book as resources some Centres are teaching their candidate to provide good answers. More candidates showed a good understanding of the subject this session than any previous sessions- well done teachers. However, there were other Centres where candidates scored really low marks as they appear not to have been prepared for this examination. Applied ICT really does require good teaching and preparation so that candidates can apply their knowledge. The questions were similar to IGCSE ones yet too often candidates were unable to provide answers at this level.

The language used by candidates was good and caused no concern to marking the scripts. A few candidates left sections blank which is not good examination technique. Candidates need to remember that the scripts will be scanned and entered for on screen marking. Therefore, if they write an answer anywhere other than the correct section they must tell the Examiner where their answer can be found. Also they really must not use correcting fluid as clearly set out on the front cover of the examination paper. By writing over this, the handwriting becomes impossible to read in some cases and the response could not be deciphered, even when viewed at $200 \%$, so marks might have been lost.

The usual comment applies about not learning generic answers by rote but applying them to the given scenario. Those candidates who had been given this advice tended to score better marks.

## Comments on specific questions

## Question 1

This question uses a topic that most candidates should understand and it was well answered in most cases.
(a) This section concerns the three items of information on a passport.

There were 14 possible answers to obtain marks and candidates usually understood which ones were sensible. Centres should emphasise that criminal records are not stored on a passport- a separate, secure database is used with the passport number as the key field. Ethnic group is also not recorded on most passports and was not accepted. Addresses are not used as they can change from time to time.
(b) This question caused some confusion. The Examiners were looking for electronic elements in a passport. These were RFID and a chip. Very few candidates gave these 2 answers- the key word being electronic. Too many answers were about barcodes, magnetic stripes and even MICR. A magnetic stripe does not hold biometric details. A bar code holds just an ID number and check digit yet they were given as holding biometric details.
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## APPLIED ICT

## Paper 9713/04

Practical Test B

## General comments

Most candidates were able to pursue the integration of the tasks and clearly recognised the development of the outcomes. Similarly most provided clear evidence as required. A common fault, however, was that candidates were unable to configure the word processor and printer options to display the mergefield evidence in full. Teachers may wish to cover this in more depth to avoid loss of marks.

Very few candidates had any difficulty with the mail merge tasks but many, indeed most, will have wasted a lot of time documenting and providing evidence of their efforts in creating a database as the source for the mergefields. This evidence was not required. It may well be that teachers prepared candidates with this expectation because of an over reliance on past papers.

Although fewer than in previous sessions, marks were lost unnecessarily when, once again, many candidates failed to recognise that the scenario for the paper is setting up a system for non-ICT specialists as users. This means that explanations, descriptions, labels and prompts must include enough detail so that functions and operations are clear. Tasks at this level are intended to simulate a business scenario and the output should reflect this.

## Comments on specific questions

## Task 1 - Merge labels

A few candidates failed to provide all the evidence showing the selection criteria, but almost all candidates completed this section well with many achieving all the marks.

Worthy of note though, is that since a principle of the paper is automation, manual selection of the recipients by inspection was not accepted as a suitable solution.

## Task 2 - A mail merge with conditional fields

Most candidates were well prepared for these tasks and provided evidence of both the search criteria and the conditional field. In the latter case some candidates resorted to screenshots in order to provide the evidence. This is not fully acceptable and Centres may wish to spend some time showing candidates how to use the word processor and printer options necessary to include this evidence in a printout.

Some candidates did not follow the format provided in the letter template and included the title and names above the address fields. Whilst this is often business practice, it was not specified in this case. In general, it worth Centres noting that candidates could be better advised to follow instructions and adhere to layouts carefully since a disappointing number of candidates lost marks for simple layout mistakes in spacing and punctuation that some proof reading before printing could have avoided.

## Task 3 - spreadsheet

It is gratifying to note the level of skill shown by candidates in pursuing this task. Many, however, may have failed to get full recognition for a number of reasons. These include:

- the format of the table was not exactly as shown
- the data from the source files was copied to a range or to a new worksheet
- the formula view was printed after the "non-blank" filter was applied
- the "IF" formulae for the text book costs returned zeroes not blanks.

All of the above were common mistakes. In particular, it is worth Centres noting that in a business scenario, source files will be updated regularly so candidates' solutions should not include the need to manually copy data to new worksheets.

## Task 4 - an invoice with linking and embedding.

In this task many candidates produced the documents for the specified recipients but displayed the table incorrectly in that details of the items not required were also shown. Clearly an invoice should show only the details and prices of the items purchased.

They key to success in this task was the presentation of the evidence showing the OLE link to the word processed document in the spreadsheet and the field codes in the document. It may be that some candidates failed to achieve the full functionality required by the task but if there was evidence of correct linking and embedding this may not have resulted in any lost marks.

## Task 5 - a Menu for the selection and production of the documents.

This task was completed well by a number of candidates and many had understood that the menu is intended as an interface for a user not involved in the creation of the system or indeed skilled in the use of ICT. In this instance the most suitable solution was a simple document with descriptions detailed enough to inform the user of the content and purpose of the options and hyperlinks to the resultant files or documents. Solutions using a switchboard menu or macros rarely enabled candidates to gain all the marks available.

Centres will find it worth noting that when instructions require documents to be created or saved with given filenames, the hyperlinks must reference these specifically.

