APPLIED INFORMATION AND COMMUNICATION TECHNOLOGY

**Paper 9713/02
Practical Test A**

General comments

This paper gave significant differences in the range of results from Centre to Centre. A small number of candidates forgot 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, an examiner is unable to award any marks for these pages.

Some candidates omitted one or more of the pages from the required printouts. A small number of candidates submitted multiple printouts for some of the tasks and did not cross out those printouts that were draft copies. Where multiple printouts are submitted, Examiners will only mark the first occurrence of each page. Candidates must be aware of the dangers of cutting and pasting cropped versions of evidence in order to save space on a sheet. It often looks impressive but this invariably leads to the loss of crucial data which could attain marks. Some candidates printed work that was too small to read even using magnification devices. Candidates MUST ensure that all text can be easily read with the naked eye.

As in previous sessions, some centres punched holes in the corners of the scripts, then joined the pages together with treasury tags or tied them with string. Sometimes these holes obscured text which was required for marking, resulting in the loss of potential marks. In some cases a number of treasury tags were used to group the pages, making it very difficult for an examiner to read all of the script.

Comments on specific questions

Question 1

This question was completed well by most candidates, as evidenced by their subsequent printouts of this evidence document.

Question 2

Most candidates deleted rows two and three from the file but a significant number did not save the file as a spreadsheet, retaining it as a comma separated values text file.

Question 3

Most candidates created the tables as specified but there were a significant number of errors in the field names where a significant number of candidates did not make the fieldnames short or consistent in style.

Question 4

Most candidates demonstrated the data structures although a small number of candidates cropped some of the screen shots so that not all the elements could be marked.

Question 5

Most candidates who attempted this question demonstrated their relationships, most candidates created the correct relationships, although fewer set them all as 'one to many'.

Question 6

Many candidates completed all elements of the task as specified, demonstrating both the query design and the completed report. The most common error was the use of the qualification code rather than displaying the lead divers' qualification in full.

Question 7

Most candidates submitted some form of deep dive report, although not many set all the dive times in the hh:mm format specified at the start of the question paper. Many candidates completed the calculated field but fewer realised that for a dive trip there was an outward journey to the site and a return journey, leading to an error in the calculation. Of those submitting this report not many candidates correctly added a calculated control to calculate the average trip time for all the deep dives.

Question 8

Most candidates who submitted a printout for this had correctly created a calculated field called 'Name' but many of the printouts did not show the full details of the calculation or concatenation used within this field. This question required the use of a crosstab query which seemed to present a number of candidates with a problem. Some candidates completed this as specified, whilst others omitted the gridlines or included the column totals, despite being instructed not to do so.

Question 9

Most candidates who attempted this task completed the wildcard search of the three locations as specified. The grouping of the report was frequently attempted but was rarely completed as required by the question paper. Most candidates set the report header as specified and fitted the grouped report onto a single page wide.

Question 10

This question caused significant problems to many candidates. Many correctly identified the need for a query to select the required dates but very few also selected the lead divers who had completed more than one dive on any specified day. The layout of the report was frequently exemplary although many of the report titles did not give the user sufficient information. Few candidates completed this as specified.

Question 11

Despite errors in **Question 10** many candidates selected the correct chart type, although some did not reduce the data to those with total dive times of more than two hours. Few candidates fully annotated their chart.

APPLIED INFORMATION AND COMMUNICATION TECHNOLOGY

Paper 9713/04
Practical Test B

Key messages

For this session, the main issues to note are as follows.

- Evidence should be provided for all specifications detailed in a task.
- Solutions should be designed to avoid the need for manual intervention if data is changed.
- It is important to provide context for users – particularly with respect to prompts in parameter queries and labels in reports.
- Some manual inspection of results is strongly advised to ensure that results are valid.
- Any text specified for entry by candidates must be exactly as shown in the question paper.
- Candidates would benefit from practice in the use of multiple and dependent conditional fields.

General comments

Most candidates were well prepared for this session, with many Centres addressing issues highlighted in previous reports.

Comments on specific tasks

Task 1 – Create a relational database with data entry restrictions

In the first task candidates were required to:

- create a simple relational database by importing four tables;
- set an input mask, create validation rules and set format specifications;
- provide screenshot evidence of the table structures, methods, data types, key fields and relationships.

This task was done well by almost all candidates and most provided the evidence required. A common weakness, however, was the omission or the unsuitability of the text to be displayed when validation rules were broken. Some candidates may have believed that the default dialogue alert was sufficient. This is not the case and candidates need to provide text for an alert that is sufficiently clear to any user.

It is also worth noting that when the question paper sets a formatting requirement, evidence of the settings should be provided. Whilst almost all candidates provided screenshots of the table structures, many did not provide all the views necessary. In particular, while many screenshots showed the Cost field set as currency, very few were provided showing the properties and evidence that the currency was set to € and 0 decimal places.

Task 2 – Create a parameter query to display the number of bookings for a course

This task required candidates to display the number of bookings for the 'Artisan bread' course. The task stated that only the name of the course and the number of bookings should be displayed. In general, this task was well understood by most candidates but a number did not provide a sufficiently clear prompt for the parameter query.

Task 3 – A report on the number of bookings for each bread course

Most candidates obtained the correct data for this report but many resorted to using a spreadsheet to create the required chart. Candidates should be aware that this is an inefficient solution since changes in data would not be reflected in the chart without manual intervention.

Most candidates were aware of the need to label and format the data so as to be fit for purpose in a business environment.

Task 4 – A report on the number of bookings for each chef during February and March

This task specified several requirements in terms of the data, the layout and the formatting. Very few candidates satisfied all of them. The most common error was the display of the chef name field. This was specified as Surname: Forename and was best provided by a concatenation in the data selection query.

Most candidates provided the required subtotals for the number of bookings and the total income for each chef, but once again, some did not insert sufficiently clear explanatory text as labels.

It is important, in tasks such as this, that candidates conduct a manual inspection of the data and their results to enable them to correct mistakes before final versions are printed.

Task 5 – A mail merge to customers

This task required candidates to select customers who had made four or more bookings and mail merge letters with personalised contents. The merge document required the insertion of conditional fields to match the *Cookery_level* code with the correct level and the recommended courses.

Whilst most candidates demonstrated a good grasp of the syntax used in conditional fields, there were common errors by candidates in this task. These were the accuracy of their text entry and the logic in the order of the conditional fields.

Candidates should be aware that there is a need for 100% accuracy when inserting the text specified in the exam paper and they would benefit from practice in the use of multiple and dependent conditional fields.

APPLIED INFORMATION AND COMMUNICATION TECHNOLOGY

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Paper 9713/12
Written A
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Key messages

Overall, candidates appeared to have been well prepared for much of this assessment. Candidates showed a reasonable level of understanding though there were areas of the syllabus of which many candidates appear to lack detailed knowledge.

On much of the paper some expansion and detail is required. It is not sufficient to give brief answers.

Discuss questions also require advantages and disadvantages to be given. It is important that comparisons are made rather than just giving features.

Questions requiring simple and straightforward answers were done well, while answers to more demanding questions needed to contain more explanation or discussion.

Centres are again reminded that this is 'Applied ICT' and candidates are expected to 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.

General comments

Candidates must read questions carefully before answering. A number of questions required descriptions which many candidates did not provide in sufficient detail. **Question 3** required descriptions, but some candidates just gave a list. This was again the case with **Question 8(a)**, where candidates were asked to describe how the devices would be used; often they were named without stating how the operator would use them.

Comments on specific questions

Question 1

Candidates did well on this question. The main weakness shown by many candidates was a lack of understanding of flexible hours working.

Question 2

Candidates did quite well on this question. Incorrect answers were evenly spread amongst the alternatives.

Question 3

This question was not well answered with few candidates gaining much credit. Many candidates described methods of analysis but few mentioned the results of the data collected. Several listed input devices without writing about how their choice would depend on the results of the analysis phase.

Question 4

The question was reasonably well answered. It appeared that candidates were quite familiar with the different methods of implementation. Many were able to contrast direct changeover and parallel running but could not adequately compare or contrast the other methods.

Question 5

This question was not very well answered. The more able candidates did quite well often making three or more good points. However, many candidates concentrated on the questions that would be on the form rather than its design and the factors that would influence this.

Question 6

This question, overall, was fairly well answered. Most candidates, however, seemed to struggle with part **(b)** more than the other parts.

(a)   Most candidates managed to gain some credit on this part of the question. Candidates generally gave at least two good descriptions. Once again, though, some candidates were inclined to name measures without describing them, resulting in those candidates missing out on credit.

(b)   Compared to part **(a)**, this was poorly answered. Very few candidates referred to the effectiveness of individual methods. Most candidates gave the overall effect of the methods and frequently wandered from the point they were making.

(c)   Candidates did much better on this part of the question with most able to describe at least two benefits. Some candidates did not read the question properly and gave answers from the point of view of the customer.

(d)   This part was quite well answered although some candidates ignored the stem of the question and still insisted on writing about the benefits of not having to travel to the bank. A small minority of candidates wrote about the benefits and drawbacks to the bank rather than to Marie.

Question 7

This question was not particularly well answered with candidates seeming to lack knowledge of the topic. It appeared that many had not prepared themselves very well for this type of question. This question produced some very weak answers. A sizeable number of candidates did not attempt to answer the question. Many gave simply incorrect answers such as =SUM(F15, F17, F18) despite the question saying that the formula included cell references from column G as well as F and that the formula had been replicated. Very few candidates gained much credit.

Question 8

Most candidates seemed fairly well prepared for this topic and gave reasonable answers. Part **(a)** was slightly better answered than Part **(b)**.

(a)   The majority of candidates gave at least one good description of the use of the device. Many, however, were inclined to just list devices for their other answers or gave unlikely uses.

(b)   This part of the question was reasonably well answered. Most candidates managed to describe at least two steps in the process but often the remainder of the answer was of a general nature rather than describing specific steps in the process.

Question 9

This question was quite well answered. Candidates seemed quite familiar with health and safety issues.

(a)   This part of the question was well answered on the whole, although a number of candidates did not write about how the issues were mainly caused by continuous use.

(b)   This part of the question was mostly well answered. Some candidates, however, confused safety with health issues. A number of candidates gave the issue without the cause. Surprisingly, some candidates continued their answer to part **(a)** by giving measures that would prevent the health issues they had described there.

Question 10

This question was not well answered. Apart from the more able candidates, many did not appear to be familiar with this topic and often gave very vague answers. Many wrote about the cost of international phone calls. Some gave reasons for relocating back to the UK which were the same as having the call centre overseas in the first place.

APPLIED INFORMATION AND COMMUNICATION TECHNOLOGY

Key messages

Candidates must read the scenarios very carefully and apply their knowledge to the context when answering the questions.

Where candidates are asked to 'describe' or 'explain' a topic, candidates need to do more than provide simple statements.

General comments

Candidates appeared to have good subject knowledge and some excellent technical descriptions were seen; however, many did not apply their knowledge to the given scenarios or to the context set in the questions.

Sometimes candidates appeared to 'spot' keywords in the question and then proceeded to write answers based on those keywords with very little application of their knowledge to the question or scenario. This will not give access to the full range of available marks. Candidates must read the questions carefully before attempting their answers.

In questions that require descriptions/explanations, points or simple statements are not enough to gain credit and score marks, e.g. in **Question 1** the simple statement that 'CAD can produce 3D drawings' is not a 'description of a feature of computer-aided design software' as required by the question; to gain credit a candidate must produce a description.

Some candidates did not attempt to answer all the questions and consequently lost the opportunity to score the marks.

Comments on specific questions

Question 1

This question required candidates to describe the features of CAD software that had been specifically produced for designing kitchens. Most candidates could describe some of the features but most did not relate them to kitchen design. Generic answers do not score highly. Good answers referred to the features and how they would assist the salesperson. Some candidates referred appropriately to the 'purpose-built' aspect of the question, for which they were credited.

Question 2

This question was about the security of the data and not solely about making the actual connection. Good answers referred to hiding the SSID from public view, the use of MAC filtering and/or encryption keys for use when making a wireless connection. Poorer answers referred generically to using user IDs and passwords. Few candidates referred to the use of the latest, more secure encryption methods such as WPA rather than WEP.

Question 3

Few candidates scored highly on this question as most simply listed the ways rather than describing the ways. 'Using email' is not a description; 'using email to send attachments or messages to the company' is a description.

Question 4

This question required candidates to focus their answers on a situation where two bookings for the same seat were requested simultaneously. Poorer answers described all the steps that the people attempting to make the bookings had to go through – these did not gain credit. Good answers referred to the receipt by the system of the requests and how it dealt with the two requests. References to flagging the seat(s) as unavailable for a short time after the original request, flagging the seat(s) as booked or removing the flag if the first booking was cancelled, and the resulting outputs gained credit. Most candidates did not score highly on this question.

Question 5

Most candidates did not appear to understand how this technology works. Good answers referred to a video camera, the encoding of video and audio, and the various steps that occur to send video/audio feeds to a geostationary satellite which then sends the signal back to Earth. Many candidates described how the signal is 'reflected by a satellite back to an antenna on the cinema' demonstrating a very poor understanding of satellite TV. Good answers included references to codecs, uplink systems, transponders and LNBs.

Question 6

The 'digital divide' appears to be understood by many candidates who described the factors that would lead to unequal access to the internet quite well. Many candidates scored highly on this question.

Question 7

This question was quite well answered by many candidates although some candidates did not really understand how the digital divide affects governments and why governments are concerned about it. Good answers included references to improvements in the economy due to a greater number of business opportunities, greater social mobility, and the government provision of online services by the government making centralisation of records easier and the increased status of country in a technological world.

Question 8

Candidates were aware of the costs involved in reducing the digital divide but most candidates gave lists rather than descriptions. Good answers needed to include descriptions of the cost of installing infrastructure to remote/all regions, the cost of subsidising IT training and hardware, and the cost of increased IT provision in schools.

Question 9

(a)   This question required candidates to give a technical answer describing how an FTP connection is established in active mode. Some candidates could give some of the details but most candidates gave generic answers about using user IDs and passwords and logging in. Good answers referred to the ports that would be used, how the client and server exchange data to establish which ports would be used and which device initiates the connection.

(b)   Most candidates gave some reference to 'encryption' but most answers were very vague with few candidates scoring highly. Good answers included references to SSL and its use to encrypt data during transmission and changing the port number to an obscure number to make it more difficult to intercept.

Question 10

Answers to this question were quite vague, often referring to malware or the firewall 'sensing that the data was foreign' and so scored few marks. Solutions to the problem were also vague and often mentioned 'reconfiguring the firewall'. The use of 'passive' mode for FTP, the usual solution to firewall problems with FTP, was not seen.

Question 11

HTTP is not the same as HTML but many candidates confused the two. Good answers included descriptions of defining how the data is transmitted, defining the actions of browsers, converting URLs into IP addresses and setting up the client-server connections.

Question 12

(a) (i) Few candidates could describe the use of a hyperlink with most reiterating the question, e.g. 'it is a link'. A good answer would describe the use of an element in a document, e.g. a word or phrase that has a link to another element, web page, or document that when clicked upon by a user takes the user to that other element.

(ii) A drop down menu is a control element that has a list of options that can be selected by the user. Few candidates could properly describe the use of a drop down menu.

(b) Very few candidates could describe the use of object-linked embedding. Many candidates confused OLE with hyperlinks and repeated the answer to part **(a)(i)**. Good answers should have referred to the export of an object to another software package from within the original software, its editing and re-import back into the original package, the fact that the object can be embedded in more than one document and the fact that any changes to the object are reflected in all documents that have the object embedded.

Question 13

In general, candidates could not discuss well the benefits and drawbacks of companies having intranets. Many candidates produced answers that contained the generic issues related to the use of networks with little reference to an intranet. This type of answer did not gain much credit. Good answers included references to security, collaboration on documents, controlling access to external web sites/internet, the use of electronic documentation for staff information and the reduced face-to-face interactions between staff.