

# INFORMATION AND COMMUNICATION TECHNOLOGY

Paper 0417/11

Written Paper

## Key messages

Candidates performed slightly better than last year. Candidates seemed to be better prepared than in previous years. Candidates appeared to have sufficient time to record all their answers with very few failing to answer all questions. There were several candidates who scored high marks but there were also a larger number of candidates than last year who scored very low marks. Candidates found difficulty answering the questions concerning microprocessor control, online processing of payments in a supermarket and the reasons for choosing test data. The wide scope of applications employed in questions on this paper meant that candidates were unable to gain high marks unless they had revised thoroughly.

In this paper candidates were given a variety of technical terms and if the candidates did not fully understand them they were unable to describe them. This was particularly the case on **Question 15**.

## Comments on specific questions

### Question 1

The vast majority of candidates gained full marks. The most common incorrect answer was given in part **(a)**.

### Question 2

This was generally very well answered. However, a smaller percentage of candidates than in previous years, gained both marks. A large number of candidates did not recognise a motor as an output device; some thought that a graphics tablet was an output device. Almost all candidates identified a laser printer as an output device.

### Question 3

A large majority of candidates were awarded full marks. Where candidates lost marks it was mainly due to the final option although some struggled with the third option, but to a much lesser extent.

### Question 4

Many candidates gained full marks. A small number did not seem to know any of the correct answers. However, a surprising number got dot matrix printer and graph plotter the wrong way round.

### Question 5

Candidates found this the most difficult question on the paper along with 12c. There appeared to be little understanding of what a firewall actually does. There were many vague answers with few specific points being made. General answers regarding viruses and hackers were common.

### Question 6

This question was quite well answered though most candidates did much better on part **(b)** rather than **(a)**

- (a)** Many candidates seemed to understand what a backup was but were either too vague or failed to give adequate reasons why they are necessary.

- (b) Most candidates did very well on explaining what a virus is but struggled when it came to explaining why backups do not prevent viruses, often just writing that a backup is not a virus checker.

### Question 7

Candidates did not score as highly on this question as expected. Most candidates appeared to have some knowledge regarding either wikis or blogs but often failed to make points about the differences.

### Question 8

This was very well answered with the majority of candidates gaining full marks. The most frequent mistake amongst those who did not get full marks was thinking that EFTPOS is a batch processing system.

### Question 9

This question was well answered with many candidates gaining full marks on what was possibly a more difficult turtle graphic question than in recent years. In cases where candidates did not do well, it was generally down to the drawing of the square at the end, but even there most candidates gained some marks for that part.

### Question 10

This question was reasonably well answered with the majority of candidates gaining at least two marks. Some candidates, however, appeared not to understand very much about video conferencing and struggled to make points relying on vague answers like it is faster, cheaper or easy to use.

### Question 11

Overall, this question was well answered. Most candidates gained full marks but a surprising number confused safety issues with health issues and struggled to get any marks.

### Question 12

Candidates had mixed fortunes with this question. Most did very well on part (a), quite well on part (b) but not very well at all on part (c)

- (a) Most candidates gained both marks.
- (b) This was well answered in the main but there was a minority of candidates who appeared to have little knowledge and some who had sensors as digital and computers as analogue devices. Some think that a modem would be used to convert the data.
- (c) This part was not well answered. There are still many candidates who think that the sensor does all the processing. A number of candidates did not have any knowledge of the processing involved. Many failed to mention a pre-set value.

### Question 13

This question was not well answered although candidates did better on part (a) than on (b) and (c)

- (a) This was reasonably well answered though many candidates referred to user ids and passwords. Some referred to phone numbers and addresses. Many did get items such as PIN, expiry date and card number.
- (b) This was not very well answered. Many candidates did not understand the comparison check on the PIN. A surprising number of candidates gave a number of validation checks at this point.
- (c) This was also not very well answered. Many candidates gave steps which had already been carried out. A number of candidates gave general answers instead of being specific. There seemed to be some confusion over the workings of this system many answering as though it were an ATM.

#### Question 14

This question was fairly well answered with part **(a)** being better answered than **(b)** and **(c)**.

- (a)** Many candidates seemed unable to describe three methods. Some named three methods without describing them. A surprising number of candidates did not seem to have any knowledge of this topic with some describing validation checks, methods of implementation or types of test data. Those that did have some knowledge and understanding usually gained full marks. There were few part marks awarded in this question.
- (b)** Some candidates gained full marks on this part but many filled the grid with information taken almost at random from the scenario. Many simply put things that were in the question in the table. Title/author, if given, were rarely in the right place.
- (c)** This part of the question was not well answered with the majority of candidates failing to gain more than two marks. Most failed to give a specific item of data and those that did often failed to give an adequate reason for its choice. A surprising number gave answers such as different types of validation check, methods of implementation or listed fields from part **(b)** rather than concentrating on price. A sizeable minority did not attempt the question.

#### Question 15

Overall this question was reasonably well answered with most candidates doing a lot better on part **(a)** rather than part **(b)**. However, a sizeable minority of candidates did not attempt the question.

- (a)** This question was very well answered with the majority of candidates gaining both marks. A sizeable minority of candidates, however, resorted to guess work with magnetic featuring as the letter M in OMR and card featuring as the C in OCR.
- (b)** This was not as well answered as part **(a)** although the majority of candidates gained at least one mark. Many candidates gave an overview without writing anything in enough detail to gain credit. Candidates who concentrated on just a few points of difference and gave some specific details did better.

#### Question 16

This question was quite well answered.

- (a)** This part of the question was extremely well answered with the large majority gaining full marks. Where candidates did fail to gain full marks, (which was rare), it was due to thinking that robots are cheap to buy or that they never need maintenance.
- (b)** This was not as well answered as part **(a)**. Candidates usually made one good point but few gave more than this. Where correct answers were given it was usually to do with programming and maintenance. A number of candidates discussed unemployment.

#### Question 17

This question was not as well answered as expected with very few candidates gaining full marks and the great majority only achieving one mark or less.

A number of candidates understood what pharming is but could not express themselves clearly enough to gain all three marks. Many candidates confused pharming with phishing.

# INFORMATION AND COMMUNICATION TECHNOLOGY

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Paper 0417/12

Written Paper

## Key messages

Candidates did not perform quite as well as last year though the standard was still high. There were a number of candidates who scored very high marks and there were very few very low marks. Candidates appeared to have sufficient time to record all their answers with very few candidates failing to answer all questions. The tendency of some candidates to learn answers from previous mark schemes off by heart was in evidence. This led to many strange answers particularly on **Question 10** where candidates often gave answers from the point of view of the customer rather than the company as directed by the question. This practice can cause candidates to lose many marks as they clearly do not necessarily understand the concepts they are memorising. In **Question 13b** candidates seemed to show a lack of knowledge of what a check digit is. The wide scope of applications employed in questions on this paper meant that candidates were unable to gain high marks unless they had revised thoroughly.

## Comments on specific questions

### **Question 1**

Nearly all candidates gained full marks. The tiny minority that did not tended to confuse the two printers.

### **Question 2**

Again, virtually all candidates gained full marks. It was surprising that a very tiny minority of candidates did not attempt the question.

### **Question 3**

The large majority of candidates again gained full marks. Incorrect answers, where provided, were evenly spread among the options.

### **Question 4**

Virtually all candidates gained full marks.

### **Question 5**

Candidates answered this question quite well with most getting full marks. However, it was worrying that a number of candidates thought that ROM stores the data a user is currently working on or that ROM is volatile.

### **Question 6**

Candidates answered this question very well with the majority getting full marks. Where full marks were not achieved it was generally due to candidates including memory devices which are part of a PC.

### Question 7

This question was well answered with many candidates gaining full marks on what was possibly a more difficult turtle graphic question than in recent years. Where candidates did not do well it was generally down to the initial few instructions.

### Question 8

This question was not as well answered as expected. Many candidates did not seem to be prepared for this topic. Marks were evenly distributed amongst the part questions though part **(b)** was the least well answered.

- (a)** Candidates frequently failed to give a description and only gave a single word answer despite the question asking them to 'describe'. It was disappointing that a sizeable number of candidates could identify the variables but could not describe them.
- (b)** Few candidates did well on this question with only a small number gaining the full marks. It attracted the award of the fewest marks of any question on the paper. Many missed the fact that the question was asking for features of a spreadsheet and only gave generic ICT responses. Those that mentioned charts or graphs often failed to gain a mark due to not explaining how they are suitable for modelling.
- (c)** Some candidates were able to gain the full marks for this question by clearly describing three distinct uses for modelling, often describing the use of simulation. The responses that just stated something that could be modelled in a one word answer could obviously not be given any credit. A number of candidates thought it required an answer giving the benefits of using models.
- (d)** This part was also poorly answered. Many candidates gave answers referring to accuracy and some confused modelling with measurement and control.

### Question 9

- (a)** Most candidates did well on this question. However, there were a significant number of candidates answering 'router'. The question clearly states no connection to the Internet.
- (b)** This part was fairly well answered by candidates. Some lost marks as they gave brand names. Others lost marks as they failed to read the question which was looking for software not hardware.
- (c)** This was the best answered part of the question. Most candidates gained credit. Some gave the topology, however the question was asking for type of network and topology is no longer in the syllabus.
- (d)** A pleasing number of candidates gained some marks on this question. Some responses were not given credit as they did not identify the reason.

### Question 10

This question was not well answered, though candidates did slightly better on part **(a)** compared to part **(b)**.

- (a)** Most candidates gained some credit on this question, better candidates gave clear advantages. However, a significant number of candidates did not read the question carefully and answered from the point of view of the user rather than the company.
- (b)** This question highlighted further the need to clearly state the disadvantage to the company. Many candidates, again, gave disadvantages to the customer.

### Question 11

This question was fairly well answered with the majority of candidates gaining at least two marks. Many candidates were able to state three features, but often failed to make it clear what the feature was being used for in the slide show. Too many responses just said 'makes it more interesting'.

### Question 12

This question was not well answered. For those candidates who understood verification most were able to obtain at least half marks for this question. A number of candidates failed to say for double data entry that it is the computer that compares the data. There still seems to be a misunderstanding that verification is used to make sure that the data is correct or accurate. Better candidates made it clear that it is a check to ensure data is copied correctly into the system. Very few stated that validation may allow reasonable yet inaccurate data.

### Question 13

On the whole this was a fairly well answered question apart from (b).

- (a) The majority of candidates gained full marks. Incorrect answers were generally given for omitting electronic scales.
- (b) This was very poorly answered with very few candidates showing any understanding of what a check digit is apart from it being something to do with bar codes.
- (c) Candidates, on the whole, did reasonably well on this part of the question, despite it being a quite complex question. As is often the case with this type of question, however, a number of candidates gave a superficial overview of the process and were unable to gain credit for specific mark points.

### Question 14

This question was fairly well answered with many candidates gaining at least two marks. A number of candidates confused phishing with pharming.

### Question 15

Most candidates did well on this question with the majority of candidates gaining at least half marks.

- (a) Most candidates gained some marks on this question. Better responses showed an understanding of the context by looking at the data given and also a clear understanding of validation rules. Weaker responses failed to give the most suitable validation rule or showed unclear understanding of them.
- (b) The majority of candidates gained at least two marks for this question with a significant number gaining the full three. Weaker candidates mixed abnormal and extreme. Some candidates failed to identify that the question was asking about test data and incorrectly gave three information gathering methods or three implementation methods. Too many candidates were able to name the methods but were unable to describe them.
- (c) The vast majority of candidates gained all three marks. Where candidates did not gain full marks there was no distinct pattern with all the incorrect options being equally distributed among the weaker candidates.

### Question 16

This was not well answered, producing a broad spectrum of marks but usually at the lower end. It was difficult to ascertain in some responses whether the candidate was making a point for or against the validity of information. Weaker candidates discussed the use of the Internet to research and missed the point that it was about the reliability of the information found on the Internet. There were, however, some good responses that covered many of the points needed to gain the higher marks.

### Question 17

Many candidates gained at least two marks for this question. Some used the same marking point twice thus failing to gain credit for the second mention. Even weaker candidates managed to make at least one good point with the more able candidates achieving 3 or sometimes 4 marks.

# INFORMATION AND COMMUNICATION TECHNOLOGY

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**Paper 0417/13**

**Written Paper**

## General comments

Overall candidates performed as well as last year. Candidates appeared to have sufficient time to record all their answers with very few failing to answer all questions. The tendency of some candidates to learn answers from previous mark schemes off by heart continued; this led to many strange answers. This practice can also cause candidates to lose marks as they clearly do not necessarily understand the concepts they are memorising. In particular in question 14b a number of candidates had learnt previous paper mark schemes off by heart and used the advantages to a customer rather than the bank as the question required. Candidates struggled with validation and also uses of modelling.

## Comments on specific questions

### **Question 1**

Most candidates gained full marks but certainly not all. Those that did not failed to identify A as a chip reader.

### **Question 2**

Not all candidates gained both marks. Virtually all candidates gained a mark for hub but many thought a PIN rather than a switch was a network device with some thinking a plotter was.

### **Question 3**

The large majority gained full marks. Those that didn't get all four tended to give the final option as technical documentation.

### **Question 4**

The majority of candidates did very well but a disappointing number thought that a CD ROM would be the most suitable storage medium for storing data on a network server.

### **Question 5**

Virtually all candidates gained full marks but some showed their lack of understanding of the two topics; expert systems and measurement.

### **Question 6**

Candidates did very well on this question. Most gained full marks though occasional incorrect answers showed that a minority of candidates didn't understand the need for technical knowledge when using a command line interface.

### **Question 7**

Candidates did well on this question with the majority gaining 4 or more marks. However, despite candidates knowing the instructions, they often could not describe their meaning.

### Question 8

This question was quite well answered apart from part **(b)**

- (a) The majority of candidates gained all three marks. The incorrect answers were spread evenly among the different options
- (b) Most candidates had difficulty with this question. A number seemed to understand the concept of using computers to measure variables but did not seem to understand control.
- (c) This was quite well answered with the vast majority of candidates gaining at least two marks. A number of candidates resorted, however, to giving answers such as it is easier or safer or faster.

### Question 9

This question was quite well answered apart part **(f)** and to a lesser extent, part **(e)**

- (a) Virtually all candidates gained the mark.
- (b) Most candidates gained the mark but a sizeable minority specified a cell which contained a decimal currency number.
- (c) This was also well answered with the vast majority of candidates gaining the mark but a surprising number gave 7 as the answer and a small number wrote 5.
- (d) The majority of candidates gained the mark but there were a small number of incorrect formulae.
- (e) This was not well answered except by the more able candidates. Many candidates could explain about the fill handle but failed to specify the cells concerned.
- (f) Again, it was only the more able candidates who gained marks for this. A surprising number did not answer the question and a number of candidates gave vague answers or applications that would involve the use of databases rather than models.
- (g) This was answered with most candidates gaining at least two marks. A surprising number thought that a model cost nothing to build or that it was quicker to build the real thing.

### Question 10

This question was quite well answered, although candidates found part **(c)** more difficult than the other parts.

- (a) The great majority of candidates gained at least one mark with most suggesting the sharing of data.
- (b) Nearly all candidates gained a mark for router. Some answered hub or switch.
- (c) Most candidates gained marks but mainly for the disadvantages. Surprisingly few candidates gained marks for the advantages giving very vague or general advantages.

### Question 11

Candidates did not do as well as expected on this question. Most found part **(a)** more difficult than **(b)**.

- (a) Few candidates gained more than one mark for this question. Again, there were many vague answers with candidates tending to generalise with answers such as 'to prevent fraud'. Many candidates wrote a long-winded answer relating to just one point
- (b) This was slightly better answered with more candidates gaining more than one mark. Many, however, spent a lot of their answers writing about how it prevents hacking which is not true.



### Question 12

This question produced a wide range of marks with most candidates achieving two or more marks. A surprising number of candidates thought that spyware was some form of anti-virus software. A number appeared to be guessing and just wrote about spying. Most knew what spam was but many could not expand their answers to gain a second mark. Again, most knew what social networking sites were but a number of candidates could not expand their answer to gain a second mark.

### Question 13

Candidates did not do as well as expected on this question, gaining most of their marks on part **(a)**

- (a)** The majority of candidates gained 3 or more marks. A number of candidates, however, just repeated data found in the scenario without giving the correct field names. Many seemed to be unaware of the correct terminology for data types.
- (b)** This was not very well answered. A high proportion of candidates did not attempt it and many who did gave verification checks or inappropriate checks such as range check.
- (c)** Again, a significant number of candidates did not attempt this question. Most had clearly not prepared for this topic and gave a number of very general answers. Some candidates wrote about 'quickly showing changes', 'doesn't affect your health', 'faster analysing the data', 'easier to transport data' etc.

### Question 14

Candidates did very well on part **(a)** but not very well on part **(b)**

- (a)** The vast majority of candidates gained at least one mark with a substantial number gaining both marks. A disappointing number of candidates used brand names.
- (b)** This was not very well answered at all. The majority of candidates did not answer the question as set and answered from the point of view of the customer rather than the bank.

### Question 15

This was quite well answered with the majority of candidates gaining at least two marks. Candidates who did not do well tended to give one word answers such as quicker or safer.

### Question 16

Many candidates gained two marks but struggled to get more. Again, there were a lot of general answers such as quicker, more productive or more practical.

# INFORMATION AND COMMUNICATION TECHNOLOGY

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**Paper 0417/02**  
**Practical Test A**

## Key Messages

The paper gave candidates opportunities to demonstrate their skills to get high marks, while at the same time providing tasks that were accessible to the full range of skills. The paper covered communication skills, document editing, database skills and integration. A chart was constructed and set into the document. Many candidates were able to complete most tasks, as these were variations on skills previously tested, which had appeared in resource materials, but there were challenges for all candidates.

Sometimes candidates who appeared to have worked on the edited document, finally provided no printed evidence of this work. This may be due to time management in the examination or failure to reach the printing step as this came after the database work and integration of the information extracted from the records. Candidates need to be aware of time and the need to print evidence even if not completed.

The second database report frequently seemed to challenge some candidates and the summary report, while similar to previous summary reports, caused candidates to draw on their skills to attempt to fulfil the task as set. Candidates whose selections for database reports include large numbers of records running to many pages can be sure that they have made some error in selection criteria. Text added must always follow the given text precisely to gain full marks.

While there were many familiar skills tested in familiar ways, there were some candidates from some Centres who demonstrated minimal practical skills and achieved very low marks.

### Step 1

An evidence document was created by the candidate in which they would place various screenshots captured during the examination. The intention of this is to reduce the number of files to print. It also reduces the repetitive instructions to place candidate details on items of evidence as these details can be placed just once in the header of the page. This document would contain evidence of the contact added to the address book, the database structure, evidence of saved files and evidence of the outgoing email message. There was no issue if these pieces of evidence were not placed in the evidence file and were printed directly as long as personal identification data was included with the printouts.

### Step 2

A contact was added to an address book. This was generally successfully done, but there were errors or omissions in the name or the job title, but the address was usually correct.

### Step 3

The candidate needed to find a set of files on the website, download them and save them to their work area, providing evidence by means of a screenshot that this process had been accomplished. If candidates were not able to access the website, a set of files as backup was available to Centres to provide directly to their candidates if in need.

## Document editing

### Steps 4 to 18

After opening the supplied source file, there were instructions to format the document in a consistent way using specified fonts, sizes and emphasis, applying a particular page layout, which changed on the page from one to two columns. Text was added as title and subtitle, and header and footer items were inserted. These were familiar skills which should be accessible to most candidates. Common errors included application of fonts incorrectly, incorrect setting of margins, occasional incorrect page orientation and the exact alignment of header and footer items to the text margins.

### Steps 19 to 29

The document was edited in a number of ways. First, the candidate was instructed to find and format several subheadings. This was to be carried out consistently (centre alignment and italics). An error in applying the correct font for the body text was treated as a follow-on consistency and not penalised.

A file in .rtf format was used to provide text for insertion into the document. Formatting was to be applied to these two new paragraphs and their accompanying subheadings to match with the existing body text. Having found the file and placed it in the document, the most common errors were not to match the font or alignment of the body text, or to use different formatting for the subheadings. Sometimes the new text was not placed in the document at the point specified.

A chart was created from a source file. This was to be presented as a pie chart and in most cases was presented in this format. The chart was usually based on the correct data. It required a title, which was to be entered with full accuracy. The segments of the chart were to be identified with their labels and one segment was to be withdrawn from the chart to emphasise its importance. The chart did not require a legend to be printed. There was often a legend and no segment labels and the largest segment was often not withdrawn or otherwise highlighted.

An image was provided and this was to be inserted at a specified point in the text, replacing some words. This image had to be placed accurately with respect to top of the paragraph and the right margin of the column. It was to be resized to fill about half the column without distortion. Examiners were tolerant of an estimated half of the column width. Text wrap was to be set round the image.

The document would need to wait for a report from the database for integration material for finalisation, but it was now ready to be checked and saved with a new name or file type. There were two deliberately misspelled words for the spelling checker to pick up. The replacements were most likely to be the first in the list of suggestions offered. Some candidates did overlook the spelling corrections. A few candidates did not provide a printout of this document; a task which they could have carried out even if they did not complete the database tasks. This was actually instructed at step 44.

## Database manipulation

### Steps 30 and 31

The database involved the import of a csv format file to specified field types. Evidence of the field names and data types was recorded in the evidence document. It was important to provide evidence of the field *DiscountApplied* - (both as numeric and as integer) – in the database structure evidence. Relatively few candidates provided this detail for this field. Evidence for date import format was checked in report 2. The currency and the logical field settings were checked here.

### Steps 32 to 34

Three existing records in the database were to be updated. This involved identifying these records and editing their contents to give details of their sale. This was different from most papers in which new records have been added. However, many candidates were able to carry out the task effectively.

Three reports were generated from the database records after editing the three records. Reports involve activities of applying selection criteria, selecting fields to print, sorting records and presenting information with calculated fields to be executed at runtime. Some candidates may find the whole process of generating and structuring these reports in their entirety somewhat difficult, but could gain marks for some of the skills demonstrated, for example, by presenting evidence of record or field selection in a printout of a query on

which the report would be based. This is a suggestion for candidates who cannot complete the full report, but may wish to gain some credit for the skills they have completed.

#### Steps 35 and 36

The first report was based on two selection criteria. This report was generally well constructed. Specified fields had to be selected for display and the records sorted on one field (*Location*). Candidates need to make sure that all required fields and headings are displayed in full. Candidates should also be aware that a very long report is probably due to a selection error as the correct selection produces a fairly short report. In this case, a correctly selected report produced fewer than fifty records out of the total of several hundred. A runtime calculation of the number of records in the report was generated. Candidates were credited for count results which matched the actual number of records in their report (if their selection criteria seemed to be flawed). Candidate details were to appear at the top of the report and then on every page of the report; (an extension of the familiar skill of inserting own details in a report).

#### Steps 37 and 38

A second report was based on cars that had been sold, so included a discount applied at the time of sale and a date sold field. The three required selection criteria were that the car had been sold, by salesperson Alger, in 2012. It also included a calculated field based on the discount applied. The report required a summary calculation of the values in the *Discount\_value* field. The report needed a heading and candidate details and was presented with specified fields only; with these fully visible. This report provided evidence for the edited records as these met the selection criteria if correctly edited. A check on currency format was made here wherever currency was to be displayed.

For some candidates, there appeared to be a problem in importing some of the records. This concerned four specific dates and did not affect every candidate even in a specific Centre. These records were generally imported with the date field blank. Examiners were aware of this and no candidate was penalised for reports with these four records absent (i.e. they could not be selected on a date in 2012).

Date format for the import was intended to be DD/MM/YYYY. If the dates appeared to have been treated as MM/DD/YYYY, then Examiners were aware that the different order of records sorted in this way could be credited. The source records had been set up to produce minimal errors on date imports.

This report was quite commonly absent.

#### Steps 39 and 40

The third report consisted of a selection of records summarising the number of cars sold and the value of these sales by the salespeople in Madrid. This type of summary had been tested before and some candidates were familiar with the processes required. A frequent selection error was not to select on *Sold = yes*. Some candidates only selected the sales person, model and price fields with no summary details. Some candidates produced these fields with summaries of sales at the end. (They could potentially gain all marks for the extraction). Some attempted reports with subtotals counting sales and calculating the sum of sales for each sales person. They too could gain several marks for this. Some produced the report but did not include it in the document – they too could gain some marks for the report.

#### Step 41

After adding some text to the end of the document, this report was to be inserted here. If the report had been generated, it was sometimes challenging to make it fit within the column. Most marks could be gained as outlined above even if fitting to the column was not achieved.

#### Steps 42 to 44

The final touches to the document were made here – checking for consistency of layout, spacing and widowed or orphaned text, blank pages and completeness of text. The document would then be printed. NB. The candidate who did not complete the database tasks should still take note of the requirement to print the document.

#### Steps 45 to 48

An email message was created with two recipients, both at the same level of priority (i.e. not a cc). One was the contact added earlier in the paper. With the saved document file attached (a check was made here that the document had been saved under a new filename) and a short text added, the message was ready to send and was included as a screenshot in the evidence document.

#### Steps 49 and 50

The evidence document was then printed as the final step of the examination.

#### Administration

Examiners do not find it helpful to have work heavily stapled into the assessment record folders. Examiners frequently need to separate the pages to ensure no evidence is concealed by the stapling.

If it is felt that the security of stapling work is desirable, then a request from Examiners is that it should be kept to a minimum or replaced with loosely tied treasury tags.

# INFORMATION AND COMMUNICATION TECHNOLOGY

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Paper 0417/03  
Practical Test B

## Key Messages

A significant number of candidates attained excellent results on this paper, the paper giving a good spread of marks, including a small number of candidates who attained full marks. For a significant number of candidates, the website authoring and presentation authoring sections of the paper were their strongest elements. In general, candidates appeared well prepared for this examination and the vast majority who submitted their work showed sound knowledge, skills and understanding with many of the candidates completing all elements of the paper. There were vast differences in the range of results from Centre to Centre. There is evidence that some candidates are rote-learning sets of skills to pass the practical examinations, rather than having the underlying knowledge and understanding to underpin these skills and allow them to be applied in any context.

Centres should **not** staple together the work; work should be submitted in the ARF along with the question paper. The date that the candidate sat the examination should also be recorded on the question paper. Both the ARF and question paper should have hand written on it the candidate's name, Centre number and candidate number. As in previous sessions, a small number of candidates did not print their name, Centre number and candidate number on every document submitted for assessment. It is important that candidates do this, as without clear printed evidence of the author of the work, marks cannot be awarded by the Examiner for these pages. It is not acceptable for candidates to hand annotate their printouts with their name as there is no real evidence that they are the originators of the work. A number of candidates omitted one or more of the pages from the required printouts. Some candidates submitted multiple printouts for some of the tasks and as instructed crossed out those printouts that were draft copies. If multiple printouts are submitted without draft versions being crossed through, only the first occurrence of that page will be marked.

## Comments on specific questions

### **Question 1**

The majority of the candidates created the evidence document successfully.

### **Questions 2 to 6**

The majority of the candidates completed these steps successfully.

### **Data Analysis**

#### **Question 7**

The majority of candidates completed this step successfully.

#### **Question 8**

The majority of candidates set the text in the footer to be centre aligned, but not all included the file path with the filename. Many candidates completed the header as specified although a significant number of candidates set the header elements in the wrong position within the header.

### Question 9

Many candidates used a LOOKUP or VLOOKUP function to solve this question and correctly displayed the name of the area for property. A significant number did not use a single relative cell reference, or the file N2LOCATION.CSV with an absolute range for the array. Some candidates used a VLOOKUP with a range which included row 1 rather than row 2, this was not penalised providing they used the False parameter to force an exact lookup match.

### Question 10

The majority of candidates completed this step successfully, although a number of candidates multiplied the two values together rather than dividing the price by the floor area of the property.

### Question 11

A significant number of candidates formatted these cells to their local currency rather than selecting dollars. Not all set these values to 0 decimal places, many set this to the default setting for dollars, that is 2 decimal places.

### Question 12

Few candidates achieved full marks for this question. There were a number of correct solutions that candidates could have selected, the most common omission was the failure to add the \$10,000 dollars to the nested IF function, (although several candidates included this within the nested IF condition, which was awarded the marks despite it not being the most efficient solution). There were a number of errors in the logic used for the IF conditions with many candidates selecting <500 rather than =<500 (or similar errors with the 4000 square feet). A significant number of candidates entered formulae which did not have the correct structure, examples included using =<500<E2=<4000 rather than using a logical AND operator.

### Question 13

This question was completed well by almost all candidates who attempted it.

### Question 14

The majority of candidates who entered all 4 formulae replicated these correctly. A small number of candidates did not replicate for all the rows, whilst some candidates replicated too many rows.

### Question 15

The majority of candidates completed this step successfully.

### Question 16

The majority of candidates completed this step successfully, although there were a number who submitted this in portrait over a number of pages.

### Question 17

The majority of candidates printed the formulae, although as mentioned in step 17 there were a significant number who did not ensure their printout fitted on a single page wide. In some cases the column widths were not resized to fit the available data and labels so marks were not achieved for this. Some candidates printed this view with text so small that it was almost impossible for Examiners to check the formulae and functions.

### Question 18

Many candidates formatted the required cells in all 3 of the required columns as dollars, fewer displayed these as integer values, frequently retaining the default 2 decimal places set by the package.

### Question 19

This question was not completed as specified by many candidates. All three elements, the centre alignment, emboldening and italicising of the top row need to be present for the marks to be obtained, many candidates completed two of these three elements but omitted the third.

### Question 20

The majority of candidates printed the values. Almost all printouts submitted fitted on a single page wide. In a number of cases, the column widths were not resized to fit the data and labels so marks were not achieved for this. As seen in **Question 17**, some candidates printed this view with text so small that it was almost impossible for Examiners to check the displayed values and labels.

### Question 21

A significant number of candidates could not hide the required columns whilst ensuring that the other columns were fully visible. Many were however successful with this.

### Question 22

Many candidates completed this step successfully, although there were a number of scripts which contained no evidence of this search.

### Question 23

The majority of candidates completed this step successfully.

### Question 24

The majority of candidates completed this step successfully.

### Question 25

This question was not completed as specified by many of the candidates. Many attempted to auto-filter the spreadsheet by selecting two of the three areas of Kowloon found within this data. Few used the 'contains' search parameter (or selected the three areas using the tick box selections). A significant number of candidates used the auto-filter function but selected the incorrect range of cells which resulted in the correct data plus an additional data item at the start (or in a few cases at the end) of the list.

### Question 26

A significant number of candidates could not hide the required columns whilst ensuring that the other columns were fully visible. Many did complete this task successfully.

### Question 27

The majority of candidates who attempted this step completed it successfully. However, there were a number of scripts showing sorting with only a single column of data selected so that the integrity of the data was lost.

### Question 28

This step was rarely completed as specified. Most candidates printed this report but few showed the row and column headings. Some candidates omitted resizing the column widths to ensure all data is fully visible.

## Website Authoring

### Question 29

The majority of candidates created a new webpage, many correctly attached the required stylesheet to the page, several did not have a relative file path for this stylesheet and a small number of candidates did not place this correctly in the head section of the markup.



### Question 30

The majority of candidates completed this step successfully. The most common error in this question was the failure to merge the cells in the left row into a single cell as shown in the diagram on the question paper.

### Question 31

Few candidates successfully aligned the table with the centre of the window.

### Question 32

The majority of candidates set the table with a width of 750 pixels. A small number of candidates used WYSIWYG packages and appeared to inadvertently change the table width from this value. This was evidenced by a small number of candidates who had included more than one printout, produced at different stages of their webpage development.

### Question 33

A significant number of candidates attempted to set the cell padding using **cell padding="3px"** rather than **cellpadding="3px"**. Likewise cellspacing was replaced by cell spacing. This was a direct copy from the question paper rather than using the correct syntax for the markup.

### Question 34

The majority of candidates completed this step successfully.

### Question 35

Although many candidates completed this as specified, a large number reversed the values for the width and the height.

### Question 36

This question was completed well by almost all candidates who attempted it.

### Question 37

This question was completed well by many candidates, although there were a number of case and spelling errors. A small number of candidates turned the number 5 into 'five' and several candidates ignored the final line of this question and did not set this text as style h1.

### Question 38

This question was completed well by many candidates, although there were a number of case errors, especially with upper case 'E' for edited. Some candidates did not set this text as paragraph style.

### Question 39

This question was not completed as well as anticipated. This may relate to the changing range of html and css commands. Commands like bgcolor, although now deprecated will still be accepted for a short period of time as current browsers will still function with these tags. Candidates were also given credit for correctly embedded css style attributes within the html table row (or table data) tag/s, for example: `<tr style="background-color:#FF0000">`

### Question 40

The majority of candidates completed this step successfully.

### Question 41

Few candidates successfully aligned the table with the centre of the window.

#### Question 42

The majority of candidates set the table with a width of 750 pixels.

#### Question 43

A significant number of candidates attempted to set the cell padding using **cell padding="3px"** rather than **cellpadding="3px"**. Likewise cellspacing was replaced by cell spacing. This was a direct copy from the question paper rather than using the correct syntax for the markup.

#### Question 44

This question was not completed as well as anticipated. A number of candidates attempted to set a darker blue colour with hex codes like #000080. This may relate to the changing range of html and css commands. Commands like bgcolor, although now deprecated will still be accepted for a short period of time as current browsers will still function with these tags. Candidates were also given credit for correctly embedded css style attributes within the html table row (or table data) tag/s, for example: <tr style="background-color:#0000FF">

#### Question 45

This question required the candidate to research the information, many completed it successfully but not all attained the marks allocated for this. Almost all candidates researched or recognised at least one of the flags; their selection was designed to give no advantage or disadvantage to candidates from any region of the world. This question frequently netted candidates full marks.

#### Question 46

The majority of candidates completed this step successfully. A minority of candidates added the image to the text in the cell, rather than replacing the text as instructed in the question paper and therefore did not achieve the mark.

#### Question 47

The majority of candidates completed this step successfully.

#### Question 48

There were a significant number of typographical errors introduced into the data entry for this bulleted list. A number of candidates did not use the <ul> and </ul> tags immediately around the list items, some even omitted the <li> and </li> tags. Where candidates added additional 'in-line' styles they were not awarded marks, with the exception of <h3> which was ignored by Examiners as it was a residual from the original text on the page 'Text here'.

#### Question 49

The majority of candidates completed this step successfully.

#### Question 50

Many candidates completed this step successfully, although there were a significant number who included an absolute file path to the specified web page, as well as those candidates who failed to set the target window to '\_blank'.

#### Question 51

A small number of candidates from a range of Centres did not correctly print one of the required printouts. Some candidates did not print the browser view using a screen shot printout from a web browser. Where this is required candidates will not be awarded marks for screen shots from a WYSIWYG package like Dreamweaver or FrontPage. A number of candidates omitted the html printout completely.

### **Question 52**

The majority of candidates completed this step successfully.

### **Presentation Authoring**

### **Question 53**

The majority of candidates completed this step successfully.

### **Question 54**

Almost all candidates set a white background, most moved the page number to the top left corner, but few candidates set their names and candidates details in the correct place in a 12 point black serif font. A significant number of scripts demonstrated a sans-serif font (which appeared to be the default font setting for the master slide items). A considerable number of candidates did not use the master slide to insert these elements as evidenced by the inconsistency of position on different slides.

### **Question 55**

The majority of candidates completed this step successfully, although some candidates retained the bullet point rather than setting a subtitle.

### **Question 56**

Almost all candidates who attempted this question completed this step successfully.

### **Question 57**

Almost all of the candidates completed this step successfully, although a very small number of candidates retained the bullet point rather than setting a subtitle.

### **Question 58**

Many candidates attempted this question and a significant number of these were successful. Other candidates included a table on the slide or a horizontal bar chart. The most common error was the use of the years for the category axis labels rather than the area names. There were a number of careless data entry errors when entering the figures in order to create the correct chart.

### **Question 59**

Almost all of the candidates completed this step successfully, although a very small number of candidates inserted the provided image of a house rather than a clip-art image.

### **Question 60**

The majority of candidates completed this step successfully.