# INFORMATION AND COMMUNICATION TECHNOLOGY

**Paper 0417/11**
**Theory**

### Key messages

To achieve higher marks in this paper candidates need to have revised the full syllabus coverage, read the question carefully before answering and given detailed answers to the question.

### General comments

The examination paper gave the opportunity for candidates to demonstrate their knowledge and application of ICT. The majority of candidates were able to use their allocated time to good effect and complete the examination paper, there were few omitted answers.

Some candidates gave extra answers to the questions that stated a set number of answers. Candidates writing extra answers will not achieve credit for these. There has been a continued improvement in this session in the layout of the advantage and disadvantage type questions allowing for more discussion and hence higher marks.

However, there is a worrying trend of the use of brand names rather than generic names in some of the answers. Examiners cannot credit the use of brand names. This was noticeable on the questions around the use of the smartphones, application software, social media and the internet. Another worrying issue that seems be increasing is missing the first line out of the answer line then continuing below the bottom line.

### Comments on specific questions

#### Question 1

This question, as a whole, was a straightforward question relating to hardware and software. It was well answered with most candidates achieving half of the marks available.

**(a)**     Most candidates were able to give the standard definition of the physical components of a computer. A few mentioned 'anything touchable', which is rather too vague an answer for this level of question.

**(b)**     It was pleasing to see most candidates correctly identified two internal devices. Some candidates however gave general hardware devices. It is important that candidates read the question carefully before answering it.

**(c)**     Many candidates achieve marks for identifying software as programs or a set of instructions. Candidates who gave 'touch and see' answers in part (a) gave the converse here. This question produced many brand names as answers, which unfortunately do not achieve marks.

**(d)**     A large proportion of candidates provided appropriate responses and were awarded the marks. However, as with part (c) some candidates included brand names in their answers, and these could not achieve marks.

**Question 2**

The vast majority of candidates achieved at least one mark for identifying one job with many achieving full marks. There did not appear to be any particular pattern in the selection of wrong answers.

**Question 3**

This question was a comparison question as it was looking for advantages. Portability was the main answer given but in order to achieve the mark it had to be related to another aspect like lightness or smallness as both types of computer are portable. Some candidates are still giving answers relating to cost and battery life, these types of answer are difficult to justify. Batteries are affected by power consumption rather than just the battery life.

**Question 4**

This question was well answered with lots of candidates achieving 3 out of the 4 marks, the main wrong answers were the 'quickest analysis of data' and the 'individuals remain anonymous' points.

**Question 5**

**(a)**      It is important with a question of this type that the question is read thoroughly before embarking on an answer. Candidates appeared to have not read the question and answers relating to parallel, phased and pilot implementation, or normal, abnormal and extreme data were common even though the question stated that it related to testing and that the modules had been tested.

Some candidates wrote quite correctly about others testing the system, but answers were vague stating selected customers could use the system. Some answers repeated that whole system testing checked the whole system without adding any detail. A few candidates recognised that modules needed to be tested separately or that the system would be tested with live data.

**(b)**      The question related to online and manual booking systems. When this question was answered well, candidates were able to compare successfully the difference between the two with relation to customers and their use of the system. They clearly described how it avoided double booking, meant they did not need to travel to the shop to book saving on cost and time rather than standing in queues etc.

In order for candidates to achieve higher marks in this type of question they need to give more clear detail in their answers, stating that the online booking can be carried out at home is too vague as it can be carried out anywhere there is an internet connection. Reduced cost and saving time were often mentioned but without expanding the points. Candidates need to relate their answer to the question set therefore answers like the risk of fraud, bogus websites and phishing, health issues due to lack of exercise are all vague answers.

**Question 6**

This was one of the best answered extended response questions with most candidates achieving 4 or more marks, showing a good understanding of health issues. Although sometimes their wording for identifying the problems was not very clear. Eye strain, headaches and back and neck problems were the most usual problems identified, although strategies for back and neck pain tended to focus on an adjustable chair, rather than adjusting the height and or tilt of the screen. Occasionally, candidates mixed up health with safety issues, writing about electrocution and trip hazards.

**Question 7**

Many candidates clearly had experience of pairing speakers or other devices to their smartphones but lacked detail when explaining the process. In most cases there was some recognition that Bluetooth needed to be turned on. A number of candidates had a firm understanding and achieved 3 or 4 marks for the turning on Bluetooth, searching for a device, clicking on it and pairing. Others correctly explained the technical side of the 79 channels, choosing another if one was in use and changing channels regularly using handshaking or spread spectrum frequency hopping.

**Question 8**

Part (a) was not as well answered, however, as part (b).

**(a)**      This question was very challenging especially for those candidates that misread the question which was about the purposes of the internet and an intranet. Candidates tended to answer the question about the differences between the internet and an intranet which had been asked in previous question papers.

**(b)**      Generally, this question was well answered. Most candidates were able to achieve three marks on the question with the most commonly incorrect tick for 'This method could be compromised by shoulder surfing'.

**Question 9**

**(a)**      This was a straightforward question that generated a large number of answers. Most candidates were able to give at least one correct answer.

**(b)**      It was a standard question about the control process although it only dealt with the sensor and the microprocessor rather than the whole process. Some candidates stated that the data was sent to the microprocessor when the paint can was empty, rather than sending data all the time. However, there was some recognition of the need to convert data from analogue to digital and a few mentioned signals being sent to an actuator. Some candidates believed that the sensor controlled the process.

**(c)**      It was well answered in the main. In order to achieve full marks in discussion questions of this type candidates need to give comparisons and detail in their answers. It was good to see that there were less lines drawn down the answer with advantages and disadvantages as headings, these types of layouts do not allow for detail or discussion.

**Question 10**

**(a)**      Many candidates knew that the V in VLOOKUP stands for vertical but were not able to express what the function does in a suitable way. LOOKUP was often stated to look up values anywhere, rather than searching vertically and horizontally.

**(b)(i)**   This question was well answered. Most candidates were able to achieve at least one mark. To achieve higher marks in a question of this type candidates should explain what the formula does rather than what each part of the formula represents.

   **(ii)**   A few candidates writing add FALSE or 0 to the formula or sorting the range. Some suggested validation but not the criteria that would be used therefore not giving sufficient detail to achieve the mark. Similarly, there were some suggestions to limit data to the room numbers available, but not how this could be achieved.

**(c)**      This question proved to be a good indicator of the level of understanding of a VLOOKUP function with many giving the correct response.

**(d)**      Many vague responses were seen. Those that thought about the question were able to give more sensible answers such as 'Making less mistakes when typing in the formula' rather than the too brief response of 'less chance of mistakes'.

Some candidates used the issues with the long formula as the opposite of the short one which was good and marks were achieved. Candidates that did well in this question gave detailed answers.

**Question 11**

**(a)**      Candidates needed to write their answers in the context of the question. Most were able to provide at least one suitable piece of personal information that could be accessed but some did not consider the context, so gave details that were unlikely to be provided in an online gaming environment.

A few candidates wrote more than one answer on each numbered line, but only the first answer in each case is marked, the other answers are not marked.

**(b)** Most responses achieved at least two of the marks with many achieving the full three marks. Weaker responses incorrectly mentioned rules about the use of passwords for example changing passwords regularly.

**(c)** This question related to other forms of protecting data when using online gaming rather than online safety in general. The most common correct answers related to not using your real name, using a firewall, using anti-spyware and using a secure website. Any answers relating to anti-virus software must also state that the anti-virus software needs to be up-to-date.

## Question 12

This question related to social networking and was fairly well answered by candidates. It is an area in which candidates that use their own knowledge as well as taught knowledge.

**(a)** Many achieved at least one mark for 'interacting with others' or its equivalent. Many candidates often just went on to write 'using the internet' or 'using social media', so did not achieve a second mark, rather than stating it was an app or website. Brand names, which did not achieve the mark in the examination were frequently seen.

**(b)** This question was answered well with most candidates achieving 4 marks out of the 6. It was clear that candidates had thought about their own use of social media and how it allows for greater communication, learning of new skills, making new friends etc. Better responses opened up the question and brought in the use made by businesses, communities and individuals.

## Question 13

**(a)** Examiners expected candidates to write about selecting the text and then converting it to a table but many candidates answered about creating a table and then copied and pasted the text into it. In order to achieve high marks in this type of question candidates need to give detail in their answers, for example highlight the text and paste in the table would not achieve as many marks as highlight one line of text, place the cursor in the part of the table the text is required then paste the data.

**(b)** Candidates wrote about what they saw happening when a spell checker is used, rather than how the spell checker determines which words are incorrectly spelt. The correct answer was a comparison of each word with words stored in the dictionary.

**(c)** This question was answered quite well with the most popular responses being the real names not recognised and the language of the spell checker.

# INFORMATION AND COMMUNICATION TECHNOLOGY

> **Paper 0417/12**
> **Theory**

### Key messages

To achieve higher marks in this paper candidates need to have revised the full syllabus coverage, read the question carefully before answering and given detailed answers to the question.

### General comments

The examination paper gave the opportunity for candidates to demonstrate their knowledge and application of ICT. The majority of candidates were able to use their allocated time to good effect and complete the examination paper, however there were more omitted answers than in previous years.

Some candidates gave extra answers to the questions that stated a set number of answers. Candidates writing extra answers will not achieve marks for these. There has been a continued improvement in this session in the layout of the advantage and disadvantage type questions allowing for more discussion and hence higher marks.

However, there is a concerning trend of the use of brand names rather than generic names in some of the answers. Examiners cannot award marks for the use of brand names. Another concerning issue that seems be increasing is missing the first line out of the answer line then continuing below the bottom answer line.

### Comments on specific questions

#### Question 1

This question was well answered by the candidates.

**(a)**    This question was well answered with most candidates achieving full marks. The examiners were looking for hardware which was part of the laptop not added to it, like a mouse.

**(b)**    This question was well answered with many candidates achieving full marks, however there were many brand names given which cannot achieve marks. Most common correct answers were operating system, compiler and linker.

#### Question 2

This was a well answered question. Most candidates were able to tick the bottom two answers correctly, namely 'This printer uses an inked ribbon' and 'This printer uses tomography'.

#### Question 3

**(a)**    This question was quite well answered however the question asked for a description of the differences meaning that the answers required some detail in order to achieve the mark.

**(b)**    This question was well answered by many of the candidates. Many correctly referred to Bluetooth, the 'cloud' and email. There is a concern that candidates incorrectly answer USB as a device, when it is actually a port on the computer and not a suitable answer on its own.

**Question 4**

This question was well answered with many candidates achieving at least half of the available marks.

**Question 5**

This question was fairly well answered by many of the candidates. There were some good answers with a range of methods described. Some candidates wrote about one method rather than a range of answers. The question asked for methods and therefore more than one method was needed to achieve the marks.

**Question 6**

This was one of the best performing extended response questions with most candidates achieving four or more marks, showing a good understanding of health issues when referring to keyboards. As in previous years some candidates mixed up health issues and safety issues. There was a lot of repeated answers given with the first occurrence achieving the mark and the repeated answer not being assessed.

**Question 7**

**(a)** Many candidates appear to have misread the question. Many candidates gave answers that were better for part (b).

**(b)** In order to achieve good marks on questions like this one, candidates should relate their answer back to the scenario as well as giving detail.

**(c)** Candidates gave a few good answers but many of the answers were vague. As with previous questions of this type in order to achieve marks candidates need to give more detail in their answers. Some candidates mixed up module with model.

**Question 8**

**(a)** This was a well answered question with many candidates giving clear details on how to produce the bar chart.

**(b)** Many candidates could describe the creation of a formula with the mouse well and achieved high marks on this question. However, some candidates forgot that the formula had to be produced by using a mouse, therefore answers relating to typing in the details achieved no marks. Some candidates were a little vague in their answers writing that data was entered, this could have been achieved by a mouse or a keyboard.

**(c)** This was well answered question but there was confusion between ascending and descending and this is where candidates did not achieve marks.

**Question 9**

Many candidates appeared to know the topic but were not able to explain it fully. Many candidates could give the name of the layer rather than describing it.

**Question 10**

This question was quite well answered with many candidates achieving at least half of the available marks.

**(a)** This was a very well answered question with many candidates achieving very high marks. Candidates were able to produce good designs that filled the available space. As in the previous examination series questions of this type which include labels need to be exact in the way they are spelt in relation to the question.

**(b)** This was a well answered question.

**(c)** Many answers lacked detail. When answering these description types of questions detail relating to the question is needed.

**(d)** This was a generally well answered question.

**Question 11**

Parts (a) and (c) were well answered but some candidates gave ADC rather than DAC for part (b).

**Question 12**

As principal examiner reports have stated for some time, discussion type questions need more detail than other types of questions. Many candidates gave answers that lacked this detail. Some candidates made good discussion points about censorship restricting viewpoints and not allowing people to have all the facts.

**Question 13**

Some candidates could explain the term correctly, but many just repeated the question. Better answers included that a moderated forum is on a platform or a website rather than just the internet.

**Question 14**

**(a)**    This question was well answered with many candidates achieving good marks. Many candidates thought that firewall stopped hackers rather than devices. Some candidates wrote about the firewall protecting the internet.

**(b)**    Mostly good answers were given but quite a few explained how candidates could determine whether or not the information was reliable rather than why reliable information is not easy to find.

# INFORMATION AND COMMUNICATION TECHNOLOGY

| Paper 0417/13 |
| Theory |

### Key messages

To achieve higher marks in this paper candidates need to have revised the full syllabus coverage, read the question carefully before answering and given detailed answers to the question.

### General comments

The examination paper gave the opportunity for candidates to demonstrate their knowledge and application of ICT. The majority of candidates were able to use their allocated time to good effect and complete the examination paper, however there were more omitted answers than in previous years.

Some candidates gave extra answers to the questions that stated a set number of answers. Candidates writing extra answers will not achieve marks for these. There has been a continued improvement in this session in the layout of the advantage and disadvantage type questions allowing for more discussion and hence higher marks.

However, there is a concerning trend of the use of brand names rather than generic names in some of the answers. Examiners cannot award marks for the use of brand names. Another concerning issue that seems be increasing is missing the first line out of the answer line then continuing below the bottom answer line.

### Comments on specific questions

### Question 1

This question was well answered by candidates with part (b) producing better results than part (a).

**(a)**     The question was well answered with many candidates able to give answers of devices that were part of a tablet computer rather than devices that could be attached to a tablet computer.

**(b)**     This part of the question was answered better than part (a).

### Question 2

Most candidates achieved 2 marks out of the 4 marks that were available.

### Question 3

**(a)**     Many candidates who gave answers related to generic software rather than expert systems. There were a large number of brand names given by the candidates that achieve no mark.

**(b)**     Many candidates give answers relating directly to computers rather than expert systems.

### Question 4

**(a)**     Many candidates incorrectly answered with data types rather than validation checks.

**(b)(i)**     This was well answered by many of the candidates who gave the correct name of the field. As in previous examination series as the name was listed in the question the spelling had to be correct to achieve the mark.

**(ii)**     This was better answered than part (i) but as with the first part it was important that the name of the field was correct in order to achieve the mark.

**(c)**     Many candidates were able to achieve the mark for this part, however some candidates thought that it could not be an integer due to its length. The answers the examiners were looking for was the leading zero or the fact that it was not used in calculations.

**(d)**     Many candidates achieved marks for the checking of the date and the creation and sending of the email rather than the technical side of the database.

**Question 5**

This question was quite well answered, part (a) was not as well answered as part (b).

**(a)**     This topic had been set in previous examination series where the answers given in those series were good.

**(b)**     This part of the question was very well answered with many candidates able to identify good methods.

**Question 6**

Candidates produced some good answers. Many candidates stated about the forum not being monitored and that it allowed freedom of speech.

**Question 7**

**(a)**     This question dealt with the computer processing and contactless cards. Some candidates appear to have misread the question and stated input and outputs relating to the topic as well as the processing.

**(b)**     Some candidates found the question quite challenging achieving only two marks out of a possible six. As with other questions of this type the way to achieve higher marks is to write a detailed answer rather than bullet points.

**(c)**     Some candidates missed out the question, whilst others made an attempt but did not expand on their answer. There was a range of incorrect answers for the abbreviation SSL.

**(d)**     In this question https://was well answered with most candidates either writing that it was a protocol or that it was secure. The second part was well answered by most stating it was the name of the bank or the domain name, although some thought it referred to the web address. The .com part was not well answered.

**Question 8**

Many candidates wrote good answers about the questionnaires and interviews but struggled with evaluating these elements. Many candidates managed to achieve two of the marks for the question.

**Question 9**

This question overall was fairly well answered especially parts (a) and (b).

**(a)**     This question was well answered with general hardware for virtual reality; however few candidates gave specialist equipment like steering wheels. Fewer candidates wrote computer and keyboard which are far too vague.

**(b)**     Most candidates were able to achieve at least one mark on this part of the question. Virtual reality is a harder concept for candidates to write about, but the answers are getting better compared to previous examination series.

**(c)**    Many candidates understood the concept of corporate house styles, but answers lacked detail. The examiners were looking for answers that clearly explained that using corporate house style meant that the documents are from the same company as they have the same format. Some candidates wrote about the house style making the company more professional.

**Question 10**

This question related to the use of eSafety strategies and social media. As with previous questions of this type some candidates did not give enough detail in their answers or repeated the same points.

**Question 11**

Both parts of this question were well answered producing some good answers.

**(a)**    Those candidates that gave the technical answer wrote that the image would become pixelated whereas others wrote that the quality of the image would be reduced, both answers were correct. This question was well answered with most candidates achieving the mark.

**(b)**    This question produced some good answers with many candidates achieving three of the five marks available. Candidates were able to explain how cropping could be carried either removing the unwanted area or selecting the area that was required. Some candidates, however, lacked detail in their answers.

**Question 12**

**(a)**    Candidates wrote about conditional formatting, but some answers lacked detail. Again, as with previous questions of this type the way to achieve higher marks is to give clear, detailed answers.

**(b)**    Good answers relating to replication achieved marks as did easy to remember the name rather than the range.

**(c)**    The answers given tended not to use the named range but wrote the range out in full, in some cases this range was incorrect therefore not achieving marks. Some candidates produced a very good answer, but others could not produce enough detail relating to the index number.

**(d)**    This question was well answered. Many candidates explained how the graph was drawn and give a good improvement. As the improvement was part of the question those candidates that did not give an improvement could not achieve full marks.

**(e)**    This question was very well answered by candidates. Many filled the space available with all the elements and produced very good layouts that could be printed out.

# INFORMATION AND COMMUNICATION TECHNOLOGY

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

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## Key messages

Candidates need to:

–   be able to distinguish between serif and sans-serif typeface categories and be able to select an appropriate font style for the typeface specified
–   enter accurately text in bold on the question paper
–   use proofing techniques to identify errors and ensure consistency of presentation
–   create, modify and apply styles in different software packages
–   base new styles on the normal or default paragraph style for the software they are using
–   be able to distinguish between the database page header/footer area and the report header/footer area and understand which is appropriate to use
–   understand the concept of grouping data in a database report
–   know how to control the import of dates in a specific format
–   be able to select contiguous and non-contiguous data to produce a chart
–   produce legible screenshots which show the outcome of an action rather than the skill process
–   printout the Evidence Document before the end of the exam as this contains supporting evidence that could substantially improve their grade
–   read and follow the instructions carefully for each question
–   use software appropriate for the task
–   insert merge fields into a master document whilst maintaining the punctuation, layout and spacing of the original text
–   include their identification details before printing as instructed on the question paper
–   know how to create presenter notes in a presentation
–   ensure that the merge result matches their master document exactly.

## General comments

Many candidates demonstrated a high level of practical ICT skills and appeared well prepared for this examination. Candidate errors were spread evenly over the sections of the paper. Most candidates completed the paper although a few submitted no evidence for the database task. On this paper an improvement in the accuracy of data entry was noted and far fewer candidates applied the capitalised font style *Algerian* to all styles and headings entered.

Good proofing techniques are important. Candidates are advised to take time to carefully check the content, layout and presentation of their work. Text to be entered as part of a task is displayed in bold on the examination paper. The accuracy of this data is assessed so it must be entered exactly as shown. Common errors which could be identified by careful proofing techniques include incorrect capitalisation of entered text, inconsistent spacing between paragraphs in the document and truncated headings and data in the database reports.

Candidates must be able to distinguish between serif and sans-serif typeface categories. These are not the actual names of font styles but categories of font type with specific attributes. Candidates must be able to select an appropriate font for the typeface specified; entering '*serif*' or '*sans-serif*' in a font dialogue box is not the correct response.

It was noted that some candidates had incorrectly hidden or deleted records that contained the same *Family_Name* in the database report 2. As a consequence, the count result was incorrect for the records

displayed. It was not clear why these records had been hidden/deleted but it may be connected to the instruction not to group the data. Grouped data refers to records that are grouped together under one field or heading instead of all the data showing for every record. Records should never be deleted from the source file unless there is a specific instruction to do so.

Candidates are required to produce screenshots to evidence the ICT skills that cannot be assessed through the printed product alone. These screenshots must display the outcome of an action and not the process so for example, the saved word processing document must be seen in the file list within the folder – the '*Save As*' dialogue box is insufficient as the save process is incomplete. Screenshot evidence is often too small and/or faint to be read even using magnification devices, or important elements have been cropped from the image. Candidates must ensure that all screenshots can be easily read with the naked eye. Care should be taken when cropping and resizing screenshots to ensure important elements are still shown such as primary keys in the table structure. Evidence in the style modification and database formula screenshots were often cropped or truncated so the marks could not be awarded.

Candidates must print evidence as it is completed rather than waiting until the end of the examination. It is essential that candidates print their Evidence Document towards the end of the examination time, regardless of whether they have finished all the questions, as this document contains supporting evidence which can substantially improve a candidate's grade.

Candidates must use the most appropriate software to complete each task. Marks cannot be awarded where word processing software has been used to complete the presentation task, or a spreadsheet used for the database task as different skills are being tested and assessed.

A small number of candidates did not print their identification details on the tasks. The question paper prompts candidates to include their name, centre number and candidate number on all tasks prior to printing. Without clear printed evidence of the author of the work marks cannot be awarded. It is not acceptable for candidates to annotate their printouts by hand as there is no real evidence that they are the originators of the work. Candidates should submit all printouts and cross through any draft versions which are not to be marked. If multiple printouts are submitted without draft versions being crossed through, only the first occurrence of each page will be marked.

Some centres are still submitting stapled work which is not permitted. Care should be taken if hole-punching work as punch holes often result in missing letters in report titles which cannot then be assessed for accuracy. Each candidate's work must be returned inside the original hard-copy Assessment Record Folder (ARF) that has been provided to the centre by Cambridge Assessment – photocopies should not be used. Please make sure a register and Supervisor's Report Folder is also completed and returned with the candidates' work. The Supervisor's Report Folder identifies the software used and can be helpful if issues were experienced during the practical test.

Candidates need to improve their understanding of importing date fields in a database in a specific format. The date order must be set as part of the import specification for that field. If the date format is not set as the data is imported the data integrity will be lost and cannot then be rectified.

## Comments on specific questions

### Task 1 – Evidence Document

The evidence document was opened and identification details entered by the majority of candidates. This document is used to store supporting screenshot evidence for skills which cannot be assessed by the printed tasks alone. Occasionally the screenshots were too small or faint to be read, or essential evidence had been cropped from the image. Candidates must ensure that all text can be easily read with the naked eye. A small number of candidates did not present the evidence document for marking, and others omitted identification details so marks could not be awarded for these pages.

### Task 2 – Document

### Question 1

All candidates opened the correct file and the majority saved it with the file name specified. Occasionally it was saved in the original rtf format rather than the format of the word processing software being used and a few candidates did not enter the file name in capitals as shown on the question paper. Screenshot evidence

of the save was often inconclusive, showing the save in process rather than capturing the outcome of the file saved in the work area. A screenshot of the folder contents after saving provides the evidence required. Most candidates retained the page setup settings as instructed.

**Question 2**

Headers and footers were usually inserted and aligned as instructed. Not all candidates used an automated field for the page numbers resulting in a keyed number 1 appearing in the header of every page. Most candidates entered the text in the footer accurately followed by their name, centre number and candidate number. A few candidates omitted the colon or the space after the colon. Occasionally the footer text wrapped to a second line, and this was often aligned at the left margin instead of all the footer details being right aligned. Occasionally the header and footer alignment changed on different pages. Candidates who used the built-in content control to align the items did not always remove superfluous text or placeholders in the header and/or footer areas.

**Question 3**

The creation and storage of the *VE-subhead* style with the correct attributes was done well by most candidates. Screenshot evidence of the style settings showed the attributes applied to this style and the formatting of the subheadings in question 10 needed to match these settings. Occasionally there were errors in the capitalisation of the style name. The most common error was not basing this new style on the normal (Microsoft Office) or default (Open Office) paragraph style for the document. The *VE-subhead* style was often based on the *VE-body* style, 'plain text' or 'no style'. A few candidates incorrectly entered 'sans-serif' as the font name in the font dialogue box which, as that font name does not exist, reverted to the default document font style. Candidates need to understand that a named font style with attributes of the specified typeface category must be selected and applied. A few candidates submitted a standalone screenshot of the paragraph formatting box to evidence the change in spacing but with no style name attributed to this evidence marks could not be awarded. If the paragraph formatting box is used to evidence formatting changes it must be shown alongside the open style dialogue box so the style name can be clearly seen.

**Question 4**

The *VE-body* style had already been created, stored and applied to the body text in the source file. Candidates were required to modify the body style settings which would automatically update the body text in the document without further intervention from the user. Modification of this style was assessed from the formatting of the body text in the document. These modifications were generally well done. Occasionally the font style was set to a sans-serif typeface or the formatting of a single paragraph was lost.

**Question 5**

The title text was usually entered accurately. This text was occasionally entered below instead of above the subtitle text.

**Question 6**

The *VE-title* style was supplied in the source file and candidates were required to modify these settings and provide screenshot evidence of the changes. This was well done although occasionally the screenshot was cropped so there was no evidence that the original style had been modified.

**Question 7**

The amended *VE-title* style was usually applied correctly to the title text. The formatting of the title text had to meet the House style specification with screenshot evidence that the style had been modified in **Question 6**. Occasionally there was extra space below the title which had not been set as part of the title style attributes.

**Question 8**

Most candidates changed the correct text to two equally spaced columns with the correct spacing between the columns. Some candidates inserted the initial column break below rather than above the first subheading and occasionally a page break was inserted instead of a section break. A small number of candidates displayed the entire document in two columns and occasionally the column spacing measured more than 1 centimetre. The most common error was not ending the column section in the correct position, so the last

paragraph reverted to one column. There were a few instances where the column formatting had been applied in separate sections resulting in the loss of paragraph order and flow.

**Question 9**

The application of bullets to the specified text was done well and most candidates using dash style bullets as instructed. Fewer candidates aligned the bullets at the left margin or changed the list to single line spacing with a 6-point space after the last item.

**Question 10**

Application of the *VE-subhead* style to the 4 subheadings in the document was usually done well. There needed to be evidence that the *VE-subhead* style had been created and saved with the formatting of all 4 subheadings matching the formatting seen in the screenshot evidence for **Question 3**. Occasionally the style applied did not match the formatting set or the style was only applied to 3 subheadings instead of 4.

**Question 11**

Most candidates created a pie chart. The data selection was often not accurate with some candidates charting data for all years or including the totals row in their selection.

**Question 12**

The chart title was usually entered but occasionally contained data entry or capitalisation errors. The sector labels often included values in addition to, or instead of, the level and percentage labels. The display was usually good with all data fully visible, no overlap and no legend displayed.

**Question 13**

The chart was usually placed in the correct position within the column width.

**Question 14**

Almost all candidates imported the correct image and positioned this in the correct paragraph. The image was usually aligned to the top of the paragraph and left of the column with text wrap applied as instructed. Occasionally the image extended into the margins or inline wrapping was applied. Occasionally the image was flipped instead of rotated but most resized it to a width of 3 centimetres. The aspect ratio was not always maintained.

**Question 15**

This question was challenging for some candidates with few achieving full marks. Not all candidates indented the text from both margins. Most displayed an external border but this was not always changed to a 3 to 4 point black border. A light grey background fill was often applied to the text and not the paragraph.

**Question 16**

In most cases the overall presentation of the document was good with styles applied consistently, columns aligned at the top of the page, no large white spaces and the bulleted list not split over columns or pages. A few candidates inserted unnecessary hard returns between paragraphs creating inconsistent spacing between paragraphs. Occasionally there was a widow or orphan, more commonly where a single line of text or subheading had been left at the bottom of a column. The document was usually presented in portrait orientation with the page setup settings maintained.

**Task 3 – Database**

**Question 17**

The importing of the csv files, creation of a primary key and relationships between the tables were usually well done by those who attempted the database task. The field names and data types were mostly set correctly. A few candidates incorrectly included an ID field in either one or both tables. Screenshot evidence of the results table was occasionally truncated so not all the field names and data types were visible. Candidates should ensure all the fields are displayed in their screenshot or produce additional screenshots

to ensure all the evidence is captured. The most common error was not storing and displaying the date fields in the format of DMY (day, month, year). Several candidates formatted these fields to MDY (month, day, year) which introduced errors when the data was imported. The formatting and display of the date and time fields were assessed in reports 1 and 2. Few candidates formatted the *Test_Date* to display in the style specified of dd-MMM-yy. The formatting of the *Start_Time* as hh:mm was often incorrect with some including seconds (hh:mm:ss) or AM/PM. Quite frequently the time format was set as h:mm with the record 09:25 displayed as 9:25.

**Question 18**

Most candidates created a relationship between the tables but the screenshot evidence did not always confirm that a one-to-many relationship had been created. The screenshot was often captured during the process of creating the relationship rather than showing the outcome. A screenshot of the relationship dialogue box will evidence the relationship type. The relationship diagram will only be credited if it shows the single and one-to-many infinity symbols confirming the relationship type. Where this mark was not achieved it was generally because the evidence produced did not show the 'one-to-many' relationship.

**Question 19**

Most candidates entered the new record details accurately in the trainee table. These details were assessed in report 1. Occasionally the new record contained data entry errors and some candidates overwrote the first record in the trainee table (*Ryan Coleman*) instead of entering this data as a new record.

**Question 20**

The first tabular report was based on the trainee table only and was generally done well by candidates who attempted this question. Duplicate records appeared where both tables were used in the query. The report title was usually entered as instructed in a larger font size at the top of the report. This title text was not always fully visible as the title text box had not been adjusted to accommodate the larger font size and as a result the 'g' descenders were truncated. The search was based on two criterion and this was generally done well. Most used a wildcard to locate the training providers containing the text *digital*. Finding the birth date in 2003 was more challenging with some searching for >01/01/2003 and <31/12/2003 which excluded these two dates. Most candidates displayed the correct fields in the report although these were not always in the correct order as, without manual intervention, the software placed the sort field *Training Provider* as the first field in the report. This can be avoided by setting the sort order in the report design rather than in the query or during the step-by-step creation of the report. Occasionally data in the *Trainee_Job* and/or *Training_Provider* fields were truncated. The sort order was usually correct with only a few sorting in descending instead of ascending order. Most candidates presented the report in portrait orientation with identification details in the header or footer, but the report did not always fit on a single page. The *Birth_Date* field was often not formatted to display the dates in DMY format.

**Question 21**

The second report used fields from both tables. The report title was usually entered as instructed in a larger font size at the top of the report. Most candidates completed the search successfully with most finding the test day of Saturday or Sunday. The *Mark_Achieved* search criteria was not always correct with some candidates searching for >25 instead of >=25, and a few candidates confusing the greater than (>) and less than (<) operators searching for <25 or <=25. The new field heading was usually entered accurately with only a few incurring a fault for omitting the underscore or for data entry errors. Those that created the new calculated field usually used the correct calculation but did not always format this to display as a percentage with 0 decimal places. Most candidates displayed the correct fields in the report although these were not always in the correct order. Occasionally data was truncated in one or more fields. The field order made the two-field sort challenging and resulted in some candidates sorting by *Subject* and then by *Test_Day*, or only sorting on the *Test_Day. S*etting the sort order in the report design rather than in the query or during the step-by-step creation of the report will give more control and will not affect the order of the fields. Most fitted the report to a single page wide and presented the report in landscape orientation. Identification details should have been entered in the page footer so they appear in the footer of every page as instructed, but several candidates entered these in the report footer so they appeared only at the end of the report. A few candidates omitted their identification details from all pages of the report which could not then be assessed. A common error was not removing the automated data in the page footer to ensure only the identification details were displayed. Most candidates used a database formula to count the number of tests but not all positioned this below the *Subject* column. Some candidates placed this calculation in the page footer so it appeared at the end of every page in the report, rather than the report footer so it appeared at the end of

report as instructed on the question paper. The count result in the report did not always give the correct result for the number of records displayed. Some candidates incorrectly deleted records from the report that had the same *Family_Name* (Begum and Micu) but the count formula still gave the result of 40 which was not correct as only 38 records were displayed. The label for the calculation was usually positioned correctly to the left of the value but occasionally contained capitalisation errors or additional punctuation. The screenshot of the formula did not always evidence that a database formula had been used and the control box was sometimes truncated so the formula was not fully visible.

### Task 4 – Mail Merge

### Question 22

The mail merge task was completed well with many candidates producing error-free work. The correct files were located and most candidates attached the data source to the master document. The merge fields were usually inserted in the correct position. Errors included leaving single chevrons when replacing the text with a merge field, deleting punctuation and spacing after the merge field and deleting the currency symbol or inserting a space after the symbol when inserting the merge field in the second paragraph. A small number of candidates attempted to key in the merge field names instead of inserting the fields from the attached data file.

### Question 23

Most candidates replaced the required text with their name and inserted their identification details in the footer of the letter. A small number did not replace the text *candidate Name* and some incorrectly placed their identification details in the header instead of the footer. A few candidates did not print the master document showing the merge fields so there was no evidence that the task had been completed using mail merge. A few candidates submitted a screenshot of the master document instead of printing the original master document as instructed.

### Question 24

The merge selection was based on one search criteria and was usually completed well. Screenshot evidence of a tick box selection method did not provide evidence that an automated filter had been used. Most set the correct criteria on the *Salary* field of '*greater than or equal*' although a few incorrectly used just '*greater than*' or just '*equal to*'. A few set the criteria to greater than or equal to 1800 instead of 18000. Some made use of the OR options with '*equals 18000*' OR '*greater than 18000*'.

### Question 25

Most candidates merged and printed the letters as specified. A few candidates had provided no printout of the master document displaying the merge fields and there was therefore no evidence that mail merge had been used to complete this task. The content, layout and formatting of the letters produced must match the master document exactly for the merge mark to be credited. On occasions the resulting merge letters did not match the master document so, for example, the fields were inserted in the master letter without spaces but in the merged letters the spacing was correct so did not match the master letter. If candidates identify an error after merging they should correct the master document and complete the merge again so the resulting letters match the master document.

### Task 5 – Printing the Evidence Document

Most candidates provided a printout of the Evidence Document. It is essential that candidates print their Evidence Document towards the end of the examination time, regardless of whether they have finished all the questions. They should make sure that their screenshots are large enough for the evidence to be legible and that cropping/resizing has not removed essential evidence.

### Task 6 – Presentation

### Question 26

Most candidates created a presentation of six slides, importing the text from the correct source file. The slide layout was not always set to display a title and bulleted list on every slide. The layout of the first slide containing just the title was not assessed and therefore accepted with a title layout. Most candidates entered their identification details although this did not always appear in the header of every slide. A few candidates

placed these in the footer area instead of the header and occasionally the position was inconsistent from one slide to another. Several candidates placed these details in the page header of the handout instead of the slide header. If built-in slide designs are used candidates must ensure the design is consistent on every page. Marks were not awarded where incorrect software had been used such as the rtf file opened, manipulated and printed using word processing software.

**Question 27**

Most candidates attempted to change the layout of the correct slide although the layout was not always set as a title and table. Some candidates applied a title, bullet and table layout, incorrectly entering the speaker notes as a bulleted item. Most created a table with 4 columns and 7 rows. The data from the correct source file was imported into the table although occasionally this text contained errors or the presentation did not match the original source data. Candidates who followed the instructions to create the table structure and copy the data into this structure presented the table well and found manipulation of the table easier.

**Question 28**

Formatting the table as instructed within the presentation software proved challenging for some candidates. Few candidates applied a plain style to the table and in many cases a themed background with shading and colour was used. Those candidates that applied a plain table style were more successful in displaying internal and external gridlines. All candidates managed to fit the table on the slide with data fully visible. The columns widths were often not adjusted to ensure the data displayed on one line.

**Question 29**

Inserting a new row as the first row of the table and merging the cells were completed with varying success. Some candidates instead of inserting a new row at the top of the table created a new, separate table with a single row, or used text boxes to imitate a new row. This caused issues as the tables were not joined so the columns did not always align and the merging was not as shown on the question paper. The text entered in the new row was not always entered accurately and often contained typographical or capitalisation errors.

**Question 30**

Most candidates were able to adjust the row heights but did not do so consistently or with the precision required. Very few candidates set the height of every row to 1.5 centimetres with the row heights either being too narrow or of inconsistent heights. Most candidates centred the text horizontally within the table but this was not always applied to all cells. Vertical alignment was not so well done and not attempted by many candidates.

**Question 31**

Candidates find entering text as presenter/speaker notes challenging. Very few candidates entered the text and printed only this slide in presenter/speaker notes layout. This text was sometimes entered as a bulleted item under the title, as a comment on the slide, or entered in a text box on the slide and then printed as a full-page slide. Occasionally the text was entered in the header/footer area. Candidates who entered the text as presenter notes usually entered this accurately. A few candidates printed all six slides in presenter/speaker note layout instead of only the single slide.

**Question 32**

Most candidates printed the presentation with six slides to the page. Either portrait or landscape orientation was accepted. A number of candidates printed the complete presentation as individual full-page slides.

# INFORMATION AND COMMUNICATION TECHNOLOGY

**Paper 0417/03**
**Practical Test B**

## Key messages

For this examination, the main issues to note are as follows:

- Candidates need a better understanding of the applying CSS as an inline style attribute of the html style tag.
- Candidates need to understand the importance of following the instructions on the question paper.
- Candidates must ensure that they include their candidate details in the correct place on all printouts.
- Candidates need to take greater care with the accuracy of data entry.
- Candidates need to take greater care with the formatting of the spreadsheet, particularly the setting of row heights and column widths to match both the question and the data or labels contained within the cells.
- Candidates need a better understanding of html syntax, particularly in the use of head and body tags.
- Candidates need to be able to use VLOOKUP functions.
- Candidates need to be able to identify which is the most appropriate function for a task.
- Candidates need to ensure that appropriate formatting is used for all cells.

## General comments

There were significant differences in the range of results from centre to centre and from candidate to candidate within centres. Candidate errors were spread evenly over the sections of the paper.

Candidates must ensure that the text within the markup and spreadsheet printouts is large enough to enable examiners to read the work, without the use of magnification devices. Candidates must also ensure that the contents of all cells in their spreadsheets, especially the formulae printouts, are fully visible.

## Comments on specific questions

**Task 2 – Data Analysis**

**Question 1**

Some candidates did not examine the file n21islands.csv carefully, which led to errors in question 4. Other candidates ignored the instruction to use this file and not copy or change it by saving the file as a spreadsheet rather than in the original .csv format.

Most candidates placed their candidate details in the footer as specified, although a significant number did not include the specified text, or this text was entered inaccurately. Many candidates added the initial text and their candidate details but omitted the text 'on' followed by the automated date.

Almost all candidates saved this new file in a spreadsheet format as specified.

**Question 2**

Most candidates merged the correct cells, although not all of these candidates accurately entered the text into this merged cell. The majority of candidates formatted the cell as specified. A small number of

candidates, often from the same few centres, erroneously used text boxes to display this data, overlaying unmerged cells.

**Question 3**

Most candidates formatted the spreadsheet as specified, not all set the height of row 2 as shown and some did not right align the cell contents in column A.

**Question 4**

Most candidates applied an appropriate VLOOKUP function to return the name of the island, although a few candidates found the syntax of the VLOOKUP function challenging. Some candidates had not examined the file in detail in question 1 and therefore did not use a precise range within their solution.

**Question 5**

Most candidates applied an appropriate VLOOKUP function to return the name of the island, although a few candidates found the syntax of the VLOOKUP function challenging. A number of candidates had not examined the file in detail in question 1 and therefore did not use a precise range within their solution.

**Question 6**

There were a number of correct solutions to this question, with answers such as:

=B13*2
=B13+B13
=SUM(B13,B13)
=PRODUCT(2,B13)

However, a number of candidates used functions that did not perform any operation, such as:

=SUM(B13+B13)
=PRODUCT(B13+B13)

In previous years this was seen in a very small number of candidates' work but was more frequently seen in this session.

**Question 7**

Despite being given the mathematical formula to calculate the number of hours, few candidates applied the order of mathematical operations to their solution, which required them to place brackets around the denominator in order to get a working solution. Many candidates omitted the ROUNDUP function to obtain the nearest hour, several of those candidates attempting this part used the ROUND function.

**Question 8**

This was well completed by most candidates but there were errors in selecting the correct cell references.

**Question 9**

Many candidates found this more challenging than question 8 because candidates had to identify the correct values to multiply which were not given to them in the question. These values should have been the fuel cost and the fuel used for the journey, but a number of candidates selected different cell references.

**Question 10**

This question proved challenging to many candidates. If candidates applied a logical method to this task, a nested solution with only 3 IF statements could attain full marks. Many candidates opted for 4 or more IF statements, often with errors in the inequalities used. Many candidates also set the numeric values of 4, 6 and 9 as strings. A number of correct answers using the IFS function where seen.

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**Question 11**

This question proved challenging to many candidates. A number of candidates worked out the number of crew at each rate and multiplied this by the rates, but omitted the multiplication by the number of hours worked by the crew. Many candidates found it challenging to set out the formula correctly using the order of mathematical operations.

**Question 12**

Most candidates completed this question as specified, although there were several instances where incorrect cell references were used.

**Question 13**

This question proved problematic for a number of candidates. While most candidates applied the appropriate currency formatting to many cells, cells B3 and/or B9 were often omitted from this formatting.

**Question 14**

Many candidates completed this as specified, although a number of candidates did not display the cells in full so that all the formulae could be marked. A number of candidates did not display row and column headings and/or gridlines.

**Question 15**

Most candidates produced the values print as specified.

**Question 16**

This data entry was performed well by many candidates, although few candidates attained the correct results due to errors in their formulae. Almost all the printouts were produced on a single portrait page without row and column headings. There were a significant number of candidates who did not provide this modelling sheet.

**Question 17**

This question was challenging for many candidates. Few candidates created a solution using AVERAGEIF functions or the alternative method using SUMIF and COUNTIF to match the atoll name in column A. Despite the low number of correct solutions, many candidates had solutions that had figures close to the correct answers as they had identified a single island within each atoll. This allowed them to go on and create an appropriate chart type for this data. Few candidates fully labelled this chart, many added axis labels but not axis titles and few candidates added a chart title that conveyed sufficient information to the user.

**Task 3 – Web Page**

**Question 18**

This question was well answered by most candidates who created the web page structure as shown. A number of candidates set some sizes in pixels rather than using percentage values. A very small number of candidates included the cell contents from the diagram in their web pages. Most candidates hid the cell borders as instructed.

**Question 19**

This was completed with mixed results. Most candidates placed the still images in the correct cells. Fewer candidates placed the video clip as specified so that it would function in all web browsers. The most successful candidates often used the <video> and <source> tags in their solutions.

**Question 20**

Few candidates placed inline style attributes into the html to fit the images to the width of the table cell. Of those who achieved the correct end result, the majority of solutions used html tags for width = '100 per cent' rather than style = 'width:100 per cent' as required by the question. The retention of the aspect ratio proved

even more challenging with candidates often attempting to set the image heights to 100 per cent of the cell size, which changed the aspect ratio rather than retaining it. The best solutions were where candidates had set the width to 100 per cent and allowed the browser to retain the aspect ratio.

**Question 21**

Most candidates placed this text in the correct cell, but fewer split this into 3 distinct paragraphs using <h2> tags or <br> tags. Despite being given the text to add as the fourth paragraph a number of candidates used the wording from some previous papers, for example replacing …updated by… with …edited by…' followed by their candidate details.

**Question 22**

Many candidates attached the stylesheet as specified but fewer candidates produced both the browser view and in particular the html listing to enable examiners to give them full credit for their work. Where the browser view was present, many candidates had omitted the address bar from their screen shot.