

# INFORMATION AND COMMUNICATION TECHNOLOGY

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**Paper 0417/11**  
**Written Paper**

## **Key messages**

As in previous sessions simple straightforward questions were well answered, but questions that required in depth answers lacked full explanations in the answers given. There continues to be a large number of generic answers given rather than relating the question to the scenario or content of the question.

There were fewer blank answers than in recent examinations with candidates attempting most of the questions.

There are still a number of candidates who are giving brand names rather than the generic names. It is clearly stated on the front page of the examination paper 'No marks will be awarded for using brand names of software packages or hardware.'

There is still a tendency to answer the question that the candidate thinks is being set rather than the one that is actually being set.

## **General comments**

All candidates appeared to have enough time to finish the paper.

Once again, some candidates gave extra answers that were not asked for and therefore not marked. There are also a worrying number of candidates who write on extra sheets and the blank pages at the end of the answer booklet. Some candidates are not noting that they have done this and Examiners can miss these responses because of the lack of such annotation.

Overall the paper was of an appropriate difficulty.

## **Comments on specific questions**

### **Question 1**

All parts of this question were well answered. This was a straightforward question with the range of answers being given in the table.

### **Question 2**

This question proved difficult for candidates who clearly mixed up impact and non-impact printers.

### **Question 3**

This question was well answered with most candidates achieving at least a mark.

### **Question 4**

The whole of this question was poorly answered with many candidates missing the question completely. This was a little surprising as questions relating to test data have been set previously in this paper and were better answered. However previously the questions have asked candidates to explain the named test data.

### Question 5

This question was well answered by most candidates although the most common incorrect answer was tripping over loose wires being a health problem. The most popular correct answers were the range check and the format check. Some candidates misread the question writing down the data types rather than the validation check.

### Question 6

As with the question on test data this question produced many poor answers. This type of question is new to the paper and this may have had an effect on the candidates' ability to answer it.

### Question 7

Candidates also had problems with this question; especially explaining what a gutter margin and a widow was. Many of those candidates who did understand the terms did not gain the marks due to a lack of in-depth answer, for example a header was a place at the top of the page where the title is written.

### Question 8

- (a) This was a standard question on video conferencing that most candidates could answer and therefore most gained full marks.
- (b) However, this part of the question related to web-conferencing and was not as well answered, with some candidates thinking that web-conferencing did not include video. Most candidates were able to answer that it was a conference using the internet, but a few stated that it was over the web; which was in the question. Candidates then had difficulty in achieving the other marks. Those candidates that understood web-conferencing were able to gain full marks.

### Question 9

RFID technology questions had been set in the previous papers therefore it was a surprise that many candidates did not gain a mark for this question.

- (a) This was a standard question relating to the operation of RFID chips, but only a few candidates were able to achieve a mark.
- (b) Some candidates answered the question relating it to the device i.e. that it was waterproof rather than about the use of the device. Those that understood what was being asked gained one mark but did not achieve the second mark.

### Question 10

This question was also poorly answered even though questions relating to models had been asked previously.

- (a) Many of the answers given to this question showed a lack of understanding of what a computer model was, some thinking that it was a physical model, therefore giving answers like it could operate well under water. The most popular correct answer was that the model could be used in different scenarios.
- (b) Most candidates only achieved one mark in this section.. As with part (a) candidates appeared to struggle with the scenario and in many cases gave generic answers or answers with little explanation.
- (c) This was the most poorly answered part of the question with most candidates not giving a comprehensive answer. Some candidates were able to explain that the microprocessor read the data from the sensor but then could not describe the comparison of this data with the pre-set data.

### Question 11

Again, as with some of the previous questions, candidates did not do well on this question.

- (a) Some candidates had problems with this formula even though COUNTIF formulae had been set on previous papers. Many candidates chose to use a VLOOKUP rather than a COUNTIF.
- (b) This part was better answered than the other parts of this question, with many candidates gaining at least a mark. As with other parts of the question this topic has been set previously. Some candidates understood the method of replicating, but could not fully explain how they did it; giving vague answers like go to the box in the cell and drag down.
- (c) This formula proved to be very difficult for most candidates. Very few candidates gained full marks on this question.
- (d) Again few candidates managed full marks on this part of the question. Many were able to explain how they inserted the chart but then did not explain what they could do to enhance it i.e. adding titles, legends etc. The mark scheme reflects that a bar chart or a pie chart could be used. Some candidates explained how they could copy all the data into another sheet and then create the chart, even though the question stated that the chart would be created on another sheet.

### Question 12

This question was fairly well answered.

- (a) This part was well answered with candidates gaining at least three marks. Many candidates gained marks for the fields and the tick boxes. The major issues were filling the screen and in some cases creating an online form rather than a paper-based one.
- (b) This was not as well answered as part (a) as some candidates had created an online form then tried to expand upon it. Others gave answers like include colour and images and some added that other fields should be added. The use of radio buttons and drop down lists were the popular correct answers.

### Question 13

- (a) This part was well answered with most candidates gaining two marks out of a possible three, and many achieved full marks. The common incorrect answer was writing videos and moving images as two separate elements.
- (b) There were a great deal of candidates getting close to the answer to this question, but not giving the correct syntax i.e. > used instead of <, the = sign missing or even writing several lines of code.
- (c) Many candidates managed to gain one or two marks on this part of the question by mentioning not using photographs that included school uniform or not using personal data, but then did not describe the issues that this could cause.

### Question 14

This question was marked as a level of response and as in the past candidates achieved few marks. Many candidates could give good differences between GUI and CLI but could not give good, if any, similarities. This meant that Level 1 was the best that many candidates could achieve.

### Question 15

This question caused problems with many candidates who understood the methods to help minimise health issues, but struggled to write down advantages of these methods. They did better on writing down disadvantages, although there was a great deal of repeated answers like 'expensive'. As there were problems with this question the Examiners allowed advantages and disadvantages that were not clearly explained; although in future, if a similar question is set this leniency may not be repeated.

**Question 16**

- (a) This part was better answered than part (b). The common correct answers were  $\frac{24}{7}$  working and safety of miners.
- (b) Many candidates managed to achieve at least a mark on this part of the question mostly for answers relating to the cost of buying/maintaining the robot. Some candidates related the answer to unemployment of the workers when the question asked about the disadvantages of using the robot.

# INFORMATION AND COMMUNICATION TECHNOLOGY

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**Paper 0417/12**  
**Written Paper**

## **Key messages**

As in previous sessions straightforward questions were well answered, but questions that required in-depth answers lacked full explanations in the responses given. Candidates need to refer to the marks allocation when answering the question.

There were less blank answers than in recent examinations with candidates attempting most of the questions.

There were still a number of candidates who are giving brand names rather than the generic names. It is clearly stated on the front page of the examination paper 'No marks will be awarded for using brand names of software packages or hardware.'

There is still a tendency to answer the question that the candidate thinks is being set rather than the one that is being set.

## **General comments**

All candidates appeared to have enough time to finish the paper.

Once again, some candidates gave extra answers that were not asked for and therefore not marked. There are also a worrying number of candidates who write on extra sheets and the blank pages at the end of the answer booklet. Some candidates are not annotating that they have done this. Examiners can miss these responses if suitable annotation is not given.

Overall the paper was of an appropriate difficulty.

## **Comments on specific questions**

### **Question 1**

This question was well answered by most candidates. Although, some candidates mixed up input and output devices.

### **Question 2**

Again, the candidates answered this question well. Most candidates gained at least one mark on this question with a few gaining full marks.

### **Question 3**

This question caused a few problems, but most candidates managed to gain at least two marks usually from hardware requirements and program listing.

### **Question 4**

This question was well answered. Cropping and rotation were well answered, but fewer candidates could identify the other techniques.

### Question 5

- (a) Many candidates managed to identify the ADC and some gave good explanations of its use; although some candidates thought it was a modem or a DAC. Some candidates named the device, but did not explain why the data had to be changed; others explained why the data had to be changed without naming the device.
- (b) This was a question that had never been asked previously and seemed to cause some confusion with the candidates. Some managed to give answers that were correct relating to the cost and the time taken but did not expand upon them or did not place them in context, hence not gaining the full marks.

### Question 6

- (a) Many candidates managed to give the answer insufficient space, but then struggled to give a correct second answer. Too many candidates wrote answers like 'format not supported' which was an incorrect answer.
- (b) Many candidates were able to find differences between the devices but did not write about similarities; hence they could not achieve full marks. Many candidates managed to gain two marks on the question from mostly the differences between the devices. Some candidates mixed up a CD-R with a CD-ROM.

### Question 7

This question as a whole was not well answered by candidates.

- (a) Many candidates gave movement sensor as the answer which was incorrect.
- (b) There was a range of acceptable answers for this question, but as in previous questions the lack of depth in the answer affected the overall mark awarded. Some candidates misread the question and gave general answers like washing machines. Other candidates focused more on the sensor rather than the device and its use, therefore giving answers that should have been used in part (c).
- (c) This part of the question was poorly answered. A lot of candidates gave descriptions of what the devices did rather than advantages and disadvantages of their use. Some candidates simply repeated what had been written in part (b).

### Question 8

- (a) This part of the question was well answered although some candidates ticked search engine and control unit.
- (b) This part on the other hand was poorly answered. Expert systems questions are not generally well answered in ICT, but this year the question asked for benefits rather than setting up an expert system. The answers given still lacked depth, with some candidates giving answers relating to the removal of the doctor rather than expert systems assisting him.

### Question 9

- (a) This type of question was used last year which asked for the candidates to describe how they would create something. There has been a large improvement in the way the candidates answered the question, but some are still giving general answers and not describing the method. Some candidates were unsure of what a relational database actually was confusing a table with a database.
- (b) This was better answered than part (a) with the major issue being Examination\_ID which had a leading zero and therefore was alphanumeric. Apart from that the question was well answered.
- (c) This part was poorly answered with very few candidates gaining both marks. Many missed out the Date\_of\_exam and other used "" when writing out the date.

- (d) Few candidates gained full marks on this part. Format check for Date\_of\_exam was well answered, but some candidates suggested a range check for Examination\_ID. Some of the explanations were weak although dd/mm/yyyy was a good correct answer.

#### Question 10

- (a) Many candidates managed to gain four or even five marks on this part of the question. The main error was not filling the box or creating an online form when it asked for a manual form.
- (b) This part of the question was not well answered. It required the candidate to explain how they would create a mail merge for the given scenario and as with similar questions some candidates gave generic answers rather than an explanation of the method. This was shown by answers that related to documents rather than the membership cards.

#### Question 11

- (a) This was a straightforward question with most candidates gaining two marks for describing how they could name the range. However, naming the range caused some problems as spaces are not allowed in named ranges, therefore underscores are needed. Those candidates that used single words, gained the mark.
- (b) This part was fairly well answered with many candidates gaining two marks. However VLOOKUP has been used in previous examinations so it was a surprise that some candidates did not get the elements in the right order. Placing the name of the range was the biggest problem facing candidates.

#### Question 12

- (a) Many candidates gained at least two marks on this question; it was well answered by most. There were a few, however, that gave 'interview' as an answer but this was part of the question.
- (b) This was not as well answered as part (a) with the lack of explanation causing the biggest problem.

#### Question 13

- (a) Many managed to gain two marks for this question with the most common incorrect answer being typists. Some candidates ticked more than the three possible answers. With open questions like this one, the mark for the question should be noted.
- (b) There was very little understanding of either term in this question. This meant that few candidates gained many marks. The compressed hours section gained more marks than the flexible hours section, where more vague answers were given.

#### Question 14

- (a) This was well answered, but there is still some confusion between verification and validation. There is also a problem between verification and proofreading; this affected the marks gained.
- (b) This part of the question was not as well answered, as many candidates believe that proofreading is a type of verification. The standard correct answer that verification makes reference to the original was the popular answer.

#### Question 15

This type of question had been asked previously and therefore it was felt that candidate should have little problem with answering it. Filling up the inbox and the possibility that it contained a virus were the popular correct answers, but there were a large number of incorrect answers.

#### Question 16

This question was the level of response question and as in previous years was poorly answered by candidates, who rarely gained marks above a Level 1. The question asks for advantages and disadvantages therefore in order to gain a Level 2 candidates must give both advantages and disadvantages. Many of those

candidates who managed to gain a Level 2 only gave the bare advantages and disadvantages. Many candidates incorrectly deviated in to the use of WIFI for WAN or using the internet. Those that discussed the difference between WIFI and Bluetooth and explained the benefits and drawbacks of each achieved the most marks. Those candidates that chose either Bluetooth or WIFI were also given credit for correct discussion points.

# INFORMATION AND COMMUNICATION TECHNOLOGY

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**Paper 0417/13**  
**Written Paper**

## Key messages

As in previous sessions straightforward questions were well answered, but questions that required in depth answers lacked full explanations in the responses given. There continues to be a large number of generic answers given rather than relating the question to the scenario or content of the question.

There were fewer blank answers than in recent examinations with candidates attempting most of the questions.

There are still a number of candidates who are giving brand names rather than the generic names. It is clearly stated on the front page of the examination paper 'No marks will be awarded for using brand names of software packages or hardware.'

There is still a tendency to answer the question that the candidate thinks is being set rather than the one that is being set.

## General comments

All candidates appeared to have enough time to finish the paper.

Once again, some candidates gave extra answers that were not asked for and therefore not marked. There are also a worrying number of candidates who write on extra sheets and the blank pages at the end of the answer booklet. Some candidates are not annotating that they have done this. Examiners can miss these responses if adequate annotation is not given.

Overall the paper was of an appropriate difficulty.

## Comments on specific questions

### **Question 1**

Candidates gained some good marks on these questions.

(a) This question was not as well answered as expected, with some candidates writing dot-matrix printer rather than graph plotter.

(b) – (d) Nearly all candidates gained the mark on these parts of the question.

### **Question 2**

Most candidates managed to gain full marks on this question.

### **Question 3**

This was a new question for the paper and apart from the vagueness of some of the responses, was well answered. We were lenient on the symbol for next slide allowing 'play the presentation'; however, if 'play' was written then this was too vague. Quite a few candidates mixed up the printer symbol with saving.

#### Question 4

Parts (a) and (b) answered better than parts (c) and (d). Candidates mixed up orphan on part (d) with widow.

#### Question 5

- (a) Some candidates mis-read the question and thought it was online banking or banking on a phone, using an app. Some candidates started with phone banking, but then part way through the answer changed to online banking. Phone banking is a separate section on the syllabus. The question also stated that the user would not be speaking to an operator, but did not reflect this in the answer given.
- (b) This was not as well answered as expected, with some candidates writing down signature and the amount of money in the bank account.

#### Question 6

- (a) The question asked for **methods**, but candidates tended to answer with devices, therefore we allowed the first word, i.e. barcode was ticked even though the candidate wrote barcode reader. We may not allow this in future series.
- (b) This part of the question was better answered than part (a). However, some candidates wrote eye recognition rather than iris or retina recognition; this we felt was too vague to be awarded a mark.
- (c) This part of the question asked the candidates to name the files and describe them. There were answers that referred to the setting up of the database and to the searching of it, which related to a question set on a previous session. Many candidates did not name the file, but we allowed the description therefore to act as the name for this series.
- (d) Many candidates managed to gain a mark for +14; although the most common incorrect responses were the missing out of the underscore or the square brackets.

#### Question 7

- (a) The most common fault with this question was the use of  $\geq$  rather than  $\geq$ . There were a number of formulae that candidates could have chosen to achieve the marks, but many made simple mistakes and hence did not achieve full marks. This occurred across all grade boundaries not just the lower ability candidates.
- (b) Since mail merge was reintroduced with the new syllabus; it has not been well answered. This question did not describe the process, but asked candidates to describe the advantages of using it. This question was poorly answered by many candidates as their responses described features or procedures of using mail merge rather than the advantages.
- (c) This question was poorly answered with candidates managing spell and grammar check, but then not achieving the third mark. Some candidates gave named validation checks which achieved a mark if it was explained, but giving three of these only gained one mark.

#### Question 8

- (a) This part of the question was generally well answered.
- (b) As with previous questions that use OR or AND there were issues with these elements being used incorrectly or being missed out. The other issue was the incorrect use of speech marks around the date.
- (c) This part of the question was not as well answered as the previous two parts. Many candidates felt the need to extend their answer to extra sheets, but rarely improved their mark. Many candidates struggled to offer benefits and drawbacks. Many responses described features of storing details on a database and other than commenting on searching and editing data there were few other benefits. Drawbacks were poorly answered with many answers relating to hackers or damaged

computers. As with comments in my previous reports, candidates did not explain their answers well enough to gain a mark.

### Question 9

Previously questions relating to ROM and RAM were simple questions relating to storage, this question, however, was designed to test the candidates understanding of the difference between the two elements. Most candidates managed to achieve half marks on the question.

### Question 10

- (a) This question was fairly well answered, although some candidates added safety elements as well as health issues. The question related to the candidates' use of computers and how they solved issues, in reality the responses; in many cases were generalised, although we did give credit to these answers. There were a number of repeated answers like 'have a break'.
- (b) The question was fairly well answered with many candidates gaining marks. However, where some candidates in part (a) gave safety answers, they gave health related responses in part (b). Text book answers such as 'trailing wires' were common but what to do was not always explained clearly. Some candidates concentrated on security answers e.g. 'hackers' 'phishing' and 'viruses'.

### Question 11

Many candidates managed to name the implementation methods, and there were a few that repeated direct changeover. As in previous questions of this type we allowed different variations of the method i.e. parallel implementation. The main problems were the advantages related to direct changeover; these tended to lack depth or were too vague.

### Question 12

- (a) This question was poorly answered and as in similar types of questions candidates did not give enough depth to their responses. Few candidates could explain 'software copyright' but gave answers about 'copying' and sometimes involved the author and permission but rarely 'protection'.
- (b) Some candidates gained good marks on this question and they demonstrated a clear understanding of the issues, others however, gave vague responses which showed a lack of knowledge on this topic.

### Question 13

- (a) Some candidates mis-read the question seeing the word key-logger and then wrote about security and hacking. Others managed to understand how key logging works although were vague in their answers i.e. logging keys.
- (b) This question, in reality, was the most poorly answered on the paper. Candidates that thought the question was about the security issues related to key-logging in part (a) continued with the same type of answer in part (b) rather than as a monitoring tool. Those that did manage to realise that it was a monitoring tool explained the actions of the key-logger rather than how they could be monitored.

### Question 14

This question was marked as a level of response question. As with previous level of response questions it proved difficult to achieve marks above a Level 1. The question refers to advantages and disadvantages therefore to achieve a Level 2 the candidate needs to give advantages and disadvantages, rather than one side of the argument. Many candidates were not clear in their answers and therefore lost marks. For example, a contactless transaction with a card is just as fast as phone transaction, but by answering phone transactions are faster than credit/debit card transactions the mark could not be awarded. Expansion of the points made could have improved the marks, but this was rarely seen. The topic however was very popular and candidates could write a great deal on it, giving some good answers.

# INFORMATION AND COMMUNICATION TECHNOLOGY

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**Paper 0417/21  
Practical Test A**

## **Key messages**

Access to the internet or email during the examination is not permitted and candidates who use the internet to find answers to the theory questions are in breach of the regulations for this syllabus. Centres who allow access to the internet may find their candidates disqualified from the whole of the 0417 qualification.

Centres should not staple their work, hole-punch or tie it together with string. Several candidates lost marks due to holes punched right through the database report headings resulting in missing letters in data entry which could not then be assessed for accuracy.

A number of candidates did not print all of the required tasks, even though they had indicated on the question paper that they had completed them. Candidates should be encouraged to print evidence as it is completed rather than waiting until the end of the examination time. They should print all pages of a document or report and not just the first page. Every task prompts the candidate to 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. Many marks can be lost because of missing candidate details and printouts will not be marked if their names and details are missing, or if their name and details are written on by hand as there is no real evidence that they are the originators of the work. Documents that extend to more than one page but have identification details on one page only, such as a database report with name at top or bottom, will be treated as the same document and the second page marked without identification details providing the layout is consistent and it is obviously a continuation of the same report/document. 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.

Candidates are required to produce screenshots to evidence the ICT skills that cannot be assessed through the printed product alone. Candidates should check each printed screenshot to ensure it is clear and large enough to be read. Where Examiners are unable to read the materials presented, they cannot award the marks. Similarly, some candidates did not achieve marks as a result of presenting screenshots with important elements cropped. Overall the readability of evidence was notably improved in this session with very few marks lost through illegible evidence.

Questions relating to Assessment Objective 3 – analyse, evaluate, make reasoned judgements and present conclusions, continue to be poorly answered. Many candidates provide descriptive responses or a list of facts rather than considering the advantages and disadvantages in the context of the question and providing a reasoned conclusion.

## **General comments**

Candidates appeared well prepared for this examination. The paper gave a good spread of marks and candidate errors were spread evenly over the sections of the paper. Most candidates completed or attempted all elements of the paper and the majority who submitted work showed sound knowledge, skills and understanding. It was apparent that candidates are now more familiar and confident with the skills assessed in the new syllabus.

There were fewer typographical errors in all elements of data entry across the paper than in previous years.

Candidates and some Centre staff still have difficulty distinguishing between the typeface categories serif and sans-serif. These are categories of font type with specific attributes and not the actual names of font styles. Some Centres have reported on the Supervisor's Report Folder that there is no font called 'serif' installed on the computers so students used Times New Roman instead. The font style names 'serif' and 'sans-serif' are unlikely to appear as an installed font.

### **Comments on specific questions**

#### ***Task 1 – The Evidence Document***

This question was completed well by most candidates. Occasionally the screenshots were too small or faint to be read. A small number did not present the evidence document for marking.

#### ***Task 2 – Document***

##### **Question 1**

Modifications to the page layout were not assessed on this paper. This question required the recalled file to be saved with a specific filename in the format of the software being used. Most managed to save the file but some failed to follow the capitalisation given or the file name contained errors. Many candidates continue to save in RTF format rather than the format of the software they are using. Screenshot evidence of the save was often inconclusive as it showed the save process rather than capturing the outcome after the file had been saved. A screenshot showing the folder contents after saving provides the required evidence.

##### **Question 2**

Headers and footers were generally inserted as instructed with an automated file path and page number field used. Occasionally these were not aligned with the page margins or the file path detail wrapped to a second line which did not align to the right margin. A few candidates used the built in content control to help align the text but did not remove superfluous text or placeholders in the header and/or footer area which was penalised.

##### **Question 3**

Candidates are required to create paragraph styles according to a house style specification provided. The styles must be correctly named and the correct attributes applied. This was completed to a higher standard than in previous sessions. Common errors in creating the styles included errors in the style names, serif or sans-serif font styles set incorrectly and incorrect spacing applied before and/or after the style. Screenshot evidence of the TSS-subhead style provided detail of the style settings. Candidates who simply applied the attributes to the relevant text rather than creating styles did not gain marks. The created style was sometimes based on another style which inherited the formatting of the original style. A style with additional formatting not detailed in the House style specification was penalised.

##### **Question 4**

The application of the TSS-title style to the document title was generally well done. Some candidates had not saved the 'all capitals' font attribute as part of the style with the title remaining in sentence case. Some had not set 11 point space after. Additional enhancements not detailed in the House style specification such as italics, or a line across the width of the page were penalised.

##### **Question 5 and 6**

Candidates entered the subtitle text along with their name. A few incorrectly entered a space before the colon. The TSS-subtitle style was correctly applied to this text although occasionally this displayed a sans-serif font style or included additional space below the text. Some had based the subtitle style on the previously created TSS-title style and the TSS-subtitle therefore inherited bold formatting (and capitals where this had been correctly set) which was penalised.

### Question 7

Most attempted to apply the TSS-body style to the rest of the text in the document. Some inconsistencies were found in the TSS-body text style with the sans-serif font style and size not applied consistently, full justification not applied to all the body text and some inconsistent spacing after paragraphs of body text. Another common error was no spacing above the chart and table which indicated that the 11 point spacing after had not been set as part of the TSS-body style. Had this been set and applied correctly the spacing above these items would have been set automatically. Candidates should check carefully that the style has been fully applied to all the text.

### Question 8

Generally the required text was changed into two columns with the required column spacing. Some candidates inserted the column break below rather than above the subheading and a small number displayed the entire document in two columns.

### Question 9

This question tested the application of the TSS-subhead style to each subheading within the document. Screenshot evidence of the TSS-subhead style settings was provided in the Evidence Document and if all eight subheadings matched these settings this application mark was awarded. If there was no evidence that the style had been created, then this application mark was not awarded.

### Question 10

Most candidates inserted a new row in the correct position in the table and entered the new data correctly although 'Literature' was occasionally keyed as 'literature' and/or the currency symbol(s) omitted. A few candidates added this entry to the bottom of their table and a few included it on a new line within the table without inserting a new row.

### Question 11

The table had been supplied in the recall file and this should have been a straightforward task of merging and formatting the first row of the table. However many candidates found merging the cells challenging and several excluded this first row from all the table formatting.

### Question 12

Candidates who created and then applied TSS-table style performed better than those who simply attempted to format the table data. Gridlines were generally applied correctly. The TSS-table style was not applied consistently with table data not left aligned and inconsistent spacing before and/or after each row. The most common error was text wrapping to a second line as the column widths had not been adjusted to accommodate the data.

### Question 13 to 17

Most candidates created a vertical bar chart and inserted this in the correct position within the column width. The most common error was the incorrect selection of data with most charting more than year 2016 only.

The chart title and x-axis label were correctly entered although a few candidates included an unnecessary legend. Formatting the value axis scale to display a maximum value with set data increments was not well done. Some candidates used the default scaling and many formatted the y-axis from 300 to 1200 resulting in a loss of data. A number of horizontal bar charts and an occasional pie chart were seen.

### Question 18 to 20

Most candidates inserted the image in the correct position and reflected it so the scroll was positioned on the right. The image was aligned and resized correctly with the text wrapped around the image. Most candidates achieved full marks for this task.

### Question 21

The overall presentation of the document was good with very few split tables and far fewer widows or orphans than in previous sessions. Most had aligned the columns at the top of each page. Spacing below the chart and table were often inconsistent and whilst the actual space had not been specified it should be consistent.

### Task 3 – Database

#### Question 22

Most candidates correctly imported the csv file and used the correct field names and data types. The primary key was set correctly but due to image cropping was not always shown in the structure screenshot but could be seen in later evidence. A few incorrectly included an ID field. A small number of candidates formatted the *Gender* field as Boolean instead of text and the date was not always displayed in the format specified. Most candidates formatted the *Paid* field to display Yes/No, but there were some instances of True/False, –1/0 or checkboxes used.

#### Question 23

Candidates were required to restrict data entry in the *Gender* field. This was expected to be set through a validation rule but other controls were accepted providing it clearly evidenced the field it applied to and there was evidence that data entry was limited to F and M only, i.e. a value list or Combo box with 'limit to list' etc. Validation was not particularly well done with very few managing to correctly restrict data entry. A number of candidates correctly set validation but did not evidence which field this had been applied to. Several evidenced a filter within a query as their version of a validation routine, or M/F set as search criteria in a query design.

#### Question 24

Most candidates entered the new record correctly and there were very few errors in this data.

#### Question 25

The second table was imported without difficulty. The primary key was correctly set and the tables successfully linked through a one-to-many relationship. There was no instruction to enforce referential integrity and this is not tested at this level.

#### Question 26

The first report used fields from the students table only. The search was based on three fields using a wildcard and search operators. The report was to display specified fields in the correct order, be sorted on two fields and presented in portrait orientation. A calculation was required to count the number of courses and this was occasionally not displayed under the *Course* field. The wildcard search on the *Course* field was often incorrect with candidates either searching for Art, or \*Art. The search criteria for *Weeks* was often incorrect with >3 or <=3. Almost all candidates correctly used the criterion *Paid is Yes*. Most displayed the correct fields but these were often in the wrong order as without manual intervention the software will default to placing the sort fields first in the report. A few candidates omitted the *Paid* field. The field widths required some manipulation to ensure these were all displayed with the data in full. Sorting on two fields was sometimes incorrect with only the *Weeks* field sorted. Most provided evidence of the formula used to calculate the number of courses although some used SUM instead of COUNT. The *Total enrolments* label was mostly entered correctly to the left of the calculation, but there were some capitalisation errors and/or the final letter was missing.

### Question 27

The second report used fields from both tables. A new field heading was inserted and a calculated field created with a simple calculation which was generally successfully achieved. The new field heading occasionally contained capitalisation or data entry errors. The calculated field was to be displayed with a currency symbol to two decimal places. Most candidates formatted the new field correctly but did not identify that *Weekly\_Cost* was also a currency value. Most displayed the correct fields but these were often in the wrong order as the software defaults to placing the sort fields first in the report. This can be avoided by setting the sort order in the report after creating the structure of the report rather than as the report is built. The report was to fit on one single landscape page and tested the candidate's ability to manipulate the data and adjust the field widths to present the report as requested. Identification details were to be entered at the top right and page numbers removed. Data was sorted on one field in ascending order which was completed well.

### Question 28

There was a very mixed response to the reasons for encoding data. Some candidates gave good clear reasons for encoding data including saving storage space and faster data entry, but others confused 'coding' with 'encryption'. Some just described how M and F were abbreviations, and others did not attempt an answer.

### Question 29

The vast majority of students identified numeric as the most appropriate data type for a telephone number field. Candidates who correctly chose alphanumeric or text gave a clear reason for their choice, but many chose 'long integer' and said it was 'because telephone numbers were long'. A minority did not attempt an answer.

### Question 30

Candidates were asked to evaluate the *Gender* and *Payment\_Type* fields of a data entry form. Many candidates described or evaluated the form as a whole instead of focussing on the two given fields. Some reiterated their answer to encoding in Step 28 and many other answers were too vague, using words like 'good', 'unprofessional', etc., without giving clear reasons for the opinion or without saying what improvements could be made. Few candidates performed well in this task with the majority describing the form or providing a general overview of what makes a good or bad form without giving an evaluation with reasons.

### Task 4 – Mail Merge

#### Question 31 to 33

The mail merge task was very well done and candidates appear to have mastered this skill. The use of a date field causes issues for some candidates who displayed the year in four figures instead of two, and some transposed the day/month to mm/dd/yy. Where a date field had been used this was not always today's date with some using CreateDate, SaveDate or PrintDate field codes. A common error is candidates incorrectly deleting existing spacing and punctuation as they replace the fields in the letter. Careful checking and proof reading would help identify these issues before the merge is completed. Most candidates replaced the required text with their name but some did not enter the other details in the footer, or incorrectly entered these in the header instead. The selection of only the three specified recipients was usually accurately achieved. Not all candidates evidence the use of a field for today's date and the formatting of this, instead giving a screen shot of the master letter or the date format dialogue box.

### Task 5 – Presentation

#### Question 34 to 35

Candidates successfully imported the slides and presented these as a title and bullet list. The master items were entered onto the slides although these were not always positioned consistently suggesting a master slide may not have been used. Marks were lost for one or more elements not being in the same position on all slides and occasionally one or more of the master items overlapped the text on the slide. The most common error was the omission of the slide numbers or slide numbers being illegible as they were not displayed in black text and could not be seen even with magnification.

### **Question 36**

Most students changed the layout of slide 1 to a Title Slide layout and added the new text correctly with their name. A few candidates left a bullet on the subtitle. When a built-in slide design had been used this did not always provide a title and subtitle that was centred in the middle of the slide, and occasionally the subtitle was larger than the title.

### **Question 37**

Most candidates attempted to draw the diagram with varying degrees of success. Only a small minority of candidates gained full marks. The text was entered within the shapes but there were numerous data entry errors with the most common being the omission of the final exclamation mark, as well as the use of initial capitals. Inserting a hexagon shape proved difficult for many and some tried to draw it using separate lines resulting in large gaps. Many did not maintain the vertical layout of the diagram and a variety of arrows were used, with many not joining the shapes together. Some candidates unnecessarily shaded the shapes.

### **Question 38**

Demoting the bulleted items to a dashed, italic list was not done well. This should have been a straightforward task using the promote/demote list option but there were many inconsistencies between each bulleted section on the slide with dashed items not aligned, text missing and italics not applied.

### **Question 39**

A significant number of candidates printed all slides as full-page slides instead of as handouts six slides to the page. Some candidates printed slide one instead of slide two as the single full-page slide.

### ***Task 6 – Printing the Evidence Document***

### **Question 40**

Some candidates submitted no printout of the Evidence Document. It is essential that candidates print their Evidence Document as failure to do so can result in a number of lost marks. Candidates should be encouraged to print this towards the end of the exam, regardless of whether they have finished the paper.

# INFORMATION AND COMMUNICATION TECHNOLOGY

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**Paper 0417/22  
Practical Test A**

## **Key messages**

Access to the internet or email during the examination is not permitted and candidates who use the internet to find answers to the theory questions are in breach of the regulations for this syllabus. Centres who allow access to the internet may find their candidates disqualified from the whole of the 0417 qualification.

Centres should not staple their work, hole-punch or tie it together with string. Several candidates lost marks due to holes punched right through the database report headings resulting in missing letters in data entry which could not then be assessed for accuracy.

A number of candidates did not print all of the required tasks, even though they had indicated on the question paper that they had completed them. Candidates should be encouraged to print evidence as it is completed rather than waiting until the end of the examination time. They should print all pages of a document or report and not just the first page. Every task prompts the candidate to 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. Many marks can be lost because of missing candidate details and printouts will not be marked if their names and details are missing, or if their name and details are written on by hand as there is no real evidence that they are the originators of the work. Documents that extend to more than one page but have identification details on one page only such as a database report with name at top or bottom, will be treated as the same document and the second page marked without identification details providing the layout is consistent and it is obviously a continuation of the same report/document. 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.

Candidates are required to produce screenshots to evidence the ICT skills that cannot be assessed through the printed product alone. Candidates should check each printed screenshot to ensure it is clear and large enough to be read. Where Examiners are unable to read the materials presented, they cannot award the marks. Similarly, some candidates did not achieve marks as a result of presenting screenshots with important elements cropped. Overall the readability of evidence was notably improved in this session with very few marks lost through illegible evidence.

Questions relating to Assessment Objective 3 – analyse, evaluate, make reasoned judgements and present conclusions, continue to be poorly answered. Many candidates provide descriptive responses or a list of facts rather than considering the advantages and disadvantages in the context of the question and providing a reasoned conclusion.

## **General comments**

Candidates appeared well prepared for this examination. The paper gave a good spread of marks and candidate errors were spread evenly over the sections of the paper. Most candidates completed or attempted all elements of the paper and the majority who submitted work showed sound knowledge, skills and understanding. It was apparent that candidates are now more familiar and confident with the skills assessed in the new syllabus.

There were fewer typographical errors in all elements of data entry across the paper than in previous years.

Candidates and some Centre staff still have difficulty distinguishing between the typeface categories serif and sans-serif. These are categories of font type with specific attributes and not the actual names of font styles. Some Centres have reported on the Supervisor's Report Folder that there is no font called 'serif' installed on the computers so students used Times New Roman instead. The font style names 'serif' and 'sans-serif' are unlikely to appear as an installed font.

### **Comments on specific questions**

#### ***Task 1 – The Evidence Document***

This question was completed well by most candidates. Occasionally the screenshots were too small or faint to be read. A small number did not present the evidence document for marking.

#### ***Task 2 – Document***

##### **Question 1**

Most candidates changed the page orientation to landscape. Amendments to the paper size and margin settings were not assessed in this paper.

##### **Question 2**

This question required the recalled file to be saved with a specified filename in the format of the word processing software being used. Most candidates saved the file but some failed to follow the capitalisation given or the file name contained errors. Some candidates continue to save in RTF format rather than the format of the software they are using. Screenshot evidence of the save was often inconclusive as it showed the save process rather than capturing the outcome after the file had been saved. A screenshot of the folder contents after saving provides the required evidence.

##### **Question 3**

Headers and footers were generally inserted as instructed with automated page numbers and an automated file name and path used. Occasionally these were not aligned with the page margins or the file path detail wrapped to a second line which did not align to the right margin. A few candidates used the built in content control to help align the text but did not remove superfluous text or placeholders in the header and/or footer area which was penalised.

##### **Question 4**

Candidates are required to create paragraph styles according to the House style specification provided. The styles must be correctly named with the correct attributes applied to each. This was completed to a higher standard than in previous sessions. Common errors in creating the styles included errors in the style names, serif or sans-serif font styles set incorrectly and incorrect spacing applied before and/or after the style. Screenshot evidence of the UG-bullet style was required to show the attributes set for this style. Candidates who simply format the relevant text rather than creating styles did not gain marks. Some styles were based on another style and therefore inherited the formatting of another style. Additional formatting which was not requested in the House style specification was penalised.

##### **Question 5**

Applying the UG-title style to the document title was well done. Candidates should not make any changes to this text. A few candidates had set a serif font type rather than a sans-serif font and some applied additional enhancements such as bold or drew a line across the width of the page which were not detailed in the House style specification and were penalised.

##### **Question 6 and 7**

Most candidates entered the subtitle text in the correct position along with their name. A few incorrectly entered a space before the colon. The UG-subtitle style was correctly applied to this text although occasionally this displayed a serif font type or included additional spacing below the text. Additional formatting inherited from the UG-title style and not listed in the House style specification (i.e. underline) was penalised.

### Question 8

Most attempted to apply the UG-body style to the rest of the text in the document. Some inconsistencies were found in the UG-body text style with a serif font style and size not applied consistently, full justification not applied to all the body text and some inconsistent spacing after paragraphs of body text. Another common error was no spacing above the chart and this suggests that the 12 point space after had not been set as part of the UG-body style. Had this been set and applied correctly the spacing above the chart would have been set automatically. Candidates should check carefully that the style has been fully applied to all the text.

### Question 9

Generally the required text was changed into three columns. Some candidates inserted the column break below rather than above the subheading and a small number displayed the entire document in three columns. The spacing between the columns was occasionally set at less than 1.5 centimetres.

### Question 10

This question tested the application of the UG-bullet style with square shaped bullets and a 1 centimetre hanging indent. A few candidates changed one or more list items to display initial capitals and some did not set a hanging indent so the text incorrectly aligned under the bullet. A small number did not apply the UG-bullet style to all the required text.

### Question 11

This question tested the application of the UG-subhead style to each subheading within the document and was generally performed well. Occasionally one subheading had been missed.

### Question 12 to 15

Most candidates created a pie chart and inserted this in the correct position within the column width. The most common error was the incorrect selection of data with most charting more than the total values only. Most entered the chart title correctly although this occasionally contained errors such as 'by' instead of 'By'. Most candidates displayed a legend but where the chart plotted four sectors the legend items were not always fully visible. Percentage values were displayed on each sector but this occasionally included additional labels and/or data.

### Question 16 and 17

Most candidates applied an external border and shading to the paragraph. Some candidates applied the border to the wrong paragraph and several applied the default border width rather than a 3 to 4 point border. Shading was applied but occasionally this was too light to be assessed. Some candidates applied the shading to the text rather than the paragraph and it therefore did not fill box.

### Question 18

The paragraph move was generally done well although a few copied the paragraph and some paragraphs were incomplete with the full stop or more not moved. Spacing around the move was often inconsistent and should be carefully checked as part of the final proofreading check.

### Question 19 to 21

Most candidates inserted the image in the correct position. Aligning, reflecting and resizing the image were generally well done. A few candidates failed to maintain the aspect ratio of the image but the majority achieved full marks for this task.

## Question 22

The overall layout and presentation of the document was generally good. Care should be taken to ensure there is consistent spacing between paragraphs, particularly where text has been moved or inserted. Some candidates did not notice or correct split lists. Occasionally the columns were not aligned at the top of the page and there were several instances of subheadings left as widows in this document. The two spelling errors in the penultimate paragraph were often not corrected.

## Question 23

This question required the candidate to evaluate the differences between a blog and a forum and recommend, with reasons, the most appropriate for use by the university. An evaluation should include positives and negatives for each method and a conclusion to suggest which would be the most appropriate for the task and why. Most responses to this question were weak. Those that attempted the question provided descriptions or a list of facts rather than relating this to the context of use by the university and providing a reasoned conclusion. A significant number of candidates confused the term 'forum' with 'form' and thought that it was not useful as it had to be filled in. Many compared a blog to an online or printed questionnaire and many seemed to think that a blog could be amended or moderated by anyone. Not many actually stated that a forum was for group discussions/sharing or that a blog was produced by one person/organisation and could not be changed by anyone else. Most candidates gave a recommendation but did not support this with their reasoning.

## Task 3 – Database

### Question 24

Almost all candidates correctly imported the csv file and used the correct field names and data types although a few incorrectly included an ID field. The *Full\_Time* field was occasionally set at a text field rather than Boolean and this was often displayed on the report with True/False or Yes/No rather than as a checkbox. Most set the primary key correctly

### Question 25

Restricting data entry in the *Length* field proved difficult for a number of candidates with many evidencing a filter within a query as their version of a validation routine. Those that did set this as a validation rule often confused the operators entering  $<6$  or  $\geq 6$  instead of  $\leq 6$ . A number of candidates correctly set validation but did not evidence which field this had been applied to. Less commonly data entry was restricted through drop down lists. Any control which restricted data entry was accepted providing it clearly evidenced the field it applied to and that no other entries would be accepted in the field.

### Question 26

Most candidates entered the new record correctly and there were very few errors in this data.

### Question 27

The second table was imported without difficulty. The primary key was correctly set and the tables successfully linked through a one-to-many relationship. There was no instruction to enforce referential integrity and this is not tested at this level.

### Question 28

This report was generally done well. Most candidates used the correct search criteria and found the correct number of records. Most displayed the correct fields but these were often in the wrong order as without manual intervention the software will default to placing the sort fields first in the report. This can be avoided by setting the sort order in the report after creating the structure of the report. The report was to fit on one single portrait page and therefore tested the candidate's ability to manipulate the data and adjust the field widths to present the report as requested. The report was usually sorted correctly on the *Length* field but the second field sort in ascending order of *Subject* proved difficult. Most correctly calculated the number of subjects, positioned this under the *Subject* field and provided evidence of the formula used although some used SUM instead of COUNT. The *Total subjects* label was mostly entered correctly to the left of the calculation, but there were some capitalisation errors and/or the final letter was missing. The most common errors were incorrect field order, truncated data and failure to present the report on one page.

### Question 29

The second report used fields from both tables and searched on three fields using a wildcard and search operators. The selection methods did not always find the correct records with a common omission being the records which began with *Science*. Where candidates create a query and enter the search criteria on separate rows using the OR option they should ensure all the criteria is entered on every row to prevent only a partial result. Most sorted the data correctly and displayed the correct fields but these were occasionally presented in the wrong order with the sort field positioned first in the report. The report was to fit the width of a landscape page and tested the candidate's ability to manipulate the data and adjust the field widths to present the report as requested. Identification details were correctly entered at the top right but many did not remove the page numbers from the report. The creation of a new calculated field was generally done well although the new field heading occasionally contained capitalisation or data entry errors. The most common errors were incorrect field order, truncated data, incorrect search criteria and the Boolean field not displayed as a checkbox.

### Task 4 – Mail Merge

#### Question 30

The mail merge task was done well and candidates appear to have mastered this skill. A number of candidates are still not using a date field and it was evident that the date had been keyed in rather than using a field. This was often presented in a shortened style or displayed as 25/04/2017 rather than in the format dd MMMM yyyy. Where a date field had been used this was not always today's date with some using CreateDate, SaveDate or PrintDate field codes. Most candidates inserted the correct merge fields in the correct position on the checklist. The most common error continues to be failure to retain space between the fields and deleting existing punctuation as they insert the fields. Several candidates had deleted the colons from the headings in the first section of the checklist. A few candidates failed to insert the *Site* and *Tutor* fields and the full stop after *Tutor* was often removed. The session fields were correctly inserted although sometimes these were duplicated. Most candidates included their details in the footer of the document although some incorrectly entered these in the header instead. Not all candidates evidenced the use of a field for today's date and the formatting of this, instead giving a screen shot of the master letter or the date format dialogue box.

#### Question 31 and 32

The mail merge selection was not done well. The selection process should have found four applicants who start on or after 11/09/2017 but a significant number of candidates failed to print the correct number of checklists even though the search criteria shown in the Evidence Document indicated they had produced the correct search. On previous papers the result of the selection produced three documents and candidates may have been expecting a similar result. A small number of candidates searched for greater than 11/09/2017 which produced only two checklists.

### Task 5 – Presentation

#### Question 33

Most candidates successfully imported the slides and presented each as a title and bulleted list.

#### Question 34

The master items were entered onto the slides although these were not always in the specified position or positioned consistently suggesting a master slide may not have been used. Marks were lost for one or more elements not being in the same position on all slides and the logo was frequently not resized resulting in the headings overlapping the logo. The most common error was the omission or inconsistent position of the slide numbers.

#### Question 35

Most students changed the layout of slide 1 to a title and subtitle layout and added their name to the text. A few candidates left a bullet on the subtitle. Any alignment of the title and subtitle were accepted although the title was expected to be larger than the subtitle.

### Question 36

Nearly all candidates deleted the slide correctly.

### Question 37

Most candidates changed the slide to a title and table layout. The table was generally well produced although some candidates incorrectly applied shading to the table. Candidates who followed the instructions to create the table structure and then copy the data into the table presented this well. A few candidates opened the CSV file and copied the data, pasting this onto a blank slide in the presentation. The table then had to be resized. This method invariably produced four columns of data rather than three.

### Question 38

Most managed to insert a new row above the first row of the table and enter the heading although this text often contained capitalisation or data entry errors. A few candidates entered the heading in a separate text box which they positioned above the table.

### Question 39 and 40

Those that inserted a new row in the table usually correctly merged the cells although the heading was not always centre aligned. The majority enlarged the font size of rows 1 and 2 although not all applied bold enhancement. Occasionally the font size was increased in columns 1 and 2 rather than rows 1 and 2.

### Question 41 and 42

The answers to the theory questions were very mixed with few candidates achieving full marks. Many answers were too vague, and there were quite a few candidates who entered more than two responses for each slide. Extra answers were ignored.

Most candidates managed to identify at least one reason why internet information may not be reliable with most stating that the information may be out of date, that wikis can be edited by non-experts and the internet is not regulated. A few responses related to the security of web pages which did not answer the question.

Methods of checking the reliability of internet information included checking the website domain with .ac, .gov and .edu suffixes given as reliable. A few incorrectly stated that .co.uk suffixes were reliable. Other common responses were comparing information from different sources/websites and checking when the information was last updated.

### Question 43

A significant number of candidates printed all slides as full-page slides instead of as handouts with 6 slides to the page. Most printed the two slides as full page slides, and either portrait or landscape orientation was acceptable.

### *Task 6 – Printing the Evidence Document*

### Question 40

Some candidates submitted no printout of the Evidence Document. It is essential that candidates print their Evidence Document as failure to do so can result in a number of lost marks. Candidates should be encouraged to print this towards the end of the exam, regardless of whether they have finished the paper.

# INFORMATION AND COMMUNICATION TECHNOLOGY

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**Paper 0417/31  
Practical Test B**

## General comments

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

Some candidates omitted one or more of the pages from the required printouts. A small number of candidates submitted multiple printouts for some of the tasks and failed to cross out those printouts that were draft copies. Candidates must be aware of the dangers of cropping evidence in order to save space on a sheet, it often looks impressive but this can lead to the loss of crucial data which could attain marks. In this session far more candidates, than in previous sessions, printed work that was too small to read even using magnification devices. Candidates MUST ensure that all text can be easily read with the naked eye.

## Comments on specific questions

### **Question 1**

Many of the candidates who showed evidence of the image resize gained full marks for the image 1731san2.png.

### **Question 2**

Where candidates successfully completed step 3, Examiners could evidence the majority of candidates had cropped the image to the specified size and saved this with the specified filename.

### **Question 3**

Most candidates created the new folder and placed the correct files within it, not all used the folder name as specified in the question paper; however, the majority of candidates did not show the folder name, file names and extensions and particularly the image dimensions in this screen shot.

### **Question 4**

A significant number of candidates responded to this evaluation stating that they would perform the tasks that they had already performed up to this point without consideration of other solutions. The most popular correct answers involved saving the file in jpeg (or gif) format and the impact that these changes would make on file size and on improved transmission/upload/download times for the webpage. Often candidates' answers were imprecise, for example: referring to 'size' rather than file size. Very few candidates suggested that the colour depth of the image could be reduced to further improve the image for website use. Only a few candidates considered the negative effects of reducing the image quality when seen in the web browser.

### Question 5

This question was well answered by the majority of candidates, creating the table to the specifications given and entering the text given. The accuracy of the text entry was not usually completed to the same high standards with a number of typographical errors evident. A significant number of candidates set appropriate alternate text for the image. This should describe to a user what the image, which is missing, shows in a format that would be suitable for output using a text reader within the browser.

### Question 6

Most candidates performed well in this question; there were many good descriptions of how they had used hyperlinks in web pages that they had created. It must be noted that several candidates thought that a hyperlink sent an email message rather than opened an email editor and prepared an email so it could be sent.

### Question 7

This question was not well answered, many candidates not adding anything in this cell, or adding descriptions of absolute and relative paths in spreadsheets, rather than in the context of a web site. There were some excellent, well considered answers from some candidates.

### Question 8

The stylesheet was often attached as specified to the webpage, although some candidates did not place this in the head section of the HTML.

### Question 9

Most candidates set the text alignment as specified and the font sizes, although fewer candidates used the most efficient methods by realising statements like font-size: 16px could be applied to 3 styles in a single statement. Frequently discovered errors included the use of incorrect syntax for the css comment which should have been placed at the top of the stylesheet and contain the candidate's name, Centre number and candidate number. Many candidates did not use the `/* */` to surround the comment, some used no notation, some used HTML comment markers and even JavaScript comment markers were seen by examiners. The use of padding (set in either the table or table data sections) was often not correct. Examiners also viewed many instances of the now deprecated HTML cell-padding=... command seen in the submissions. A significant number of candidates did not replace the words *List style* with the correct selector. A number of candidates did not save this stylesheet with a filename containing their candidate number, or if they did save it in this format, did not then attach this stylesheet file to their web page. Most candidates who did use the correct filename and attached the stylesheet to their web page got the correct priority by placing this stylesheet below the one attached in step 8.

A few stylesheet screenshots contained truncated lines of css, often omitting part of their definitions including the closing curly bracket `}`. Many of the screen shots submitted for both the browser view and the html were too small to read, even when enlarged with magnification devices.

### Question 10

The majority of candidates completed this step as specified although a small number placed both text elements in the header rather than one in the header and one in the footer.

### Question 11

This step was completed well by the majority of candidates, a small number of candidates set the text as a serif rather than sans serif font. A few candidates did not alter the text colour to white.

### Question 12

Most candidates completed this as specified. Some candidates set the range to jc rather than JC.

### Question 13

The majority of candidates completed this step with 100% accuracy. The data set that was used for the lookup range was not sorted so the LOOKUP function was not appropriate for this task and the final False (or 0) parameter was required. Some candidates omitted this parameter.

### Question 14

This function was frequently completed as specified with the majority of candidates obtaining the right answer.

### Question 15

Most candidates who completed steps 13 and 14 replicated these functions as specified.

### Question 16

Most candidates completed this using an AVERAGE function although not all specified the correct range.

### Question 17

Unfortunately, a significant number of candidates placed the formula in cell F61 rather than cell G61. The formula was frequently correct, although some candidates did select an incorrect range for the SUM.

### Question 18

Many candidates completed this as specified, but a significant number of candidates did not set the Pay rate column as currency. Other errors noted here included the use of incorrect or inconsistent currency values and formatting the average number of hours worked as a currency value.

### Question 19

Most candidates successfully saved and printed their spreadsheet, but a number failed to display the row and column headings and/or set the column widths so that all data and formulae could be seen by the Examiner.

### Question 20

Almost all candidates completed this step as instructed.

### Question 21

Although a significant number of candidates completed this as specified there were a number of candidates who hid rows 1 and 2 as well as rows 3 to 15. Most candidates had hidden rows 60 and 61.

### Question 22

More candidates completed this searching and sorting task with 100% accuracy than many previous sessions. There were search errors, especially where wildcard searches had not been performed, some candidates also failed to sort the data in ascending order of name. Some candidates did not select all the data when sorting resulting in the loss of data integrity.

# INFORMATION AND COMMUNICATION TECHNOLOGY

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Paper 0417/32  
Practical Test B

## General comments

There were significant differences in the range of results from Centre to Centre and from candidate to candidate within Centres. The paper gave a good spread of marks and candidate errors were spread evenly over the sections of the paper.

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

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

## Comments on specific questions

### Question 1

Most candidates completed this step as specified, although there were a significant number of candidates who did not give the folder the correct name. A number of candidates did not show the original 1732switch.png in their Evidence Document.

### Question 2

Very few candidates showed the Examiner evidence of **how** they reduced the colour depth of the image. Some altered the colour balance by changing red green and blue levels instead of reducing the colour depth. Whilst most candidates gave before and after printouts, few showed their method.

### Question 3

With few candidates showing evidence of the reduction in colour depth in step 2, many did not evaluate their attempts. Many entered descriptions of their method that did not reduce the number of colours/changing the file type or saving with 8 bits per channel rather than 16 bits per channel. Some candidates did discuss reducing the image to 2 colours (to black and white) and others gained a mark for a realisation that image quality was changed with their attempts. Other popular correct answers involved saving the file in jpeg (or gif) format and the impact that these changes would make on file size and on improved transmission/upload/download times for the web page.

### Question 4

Examiners could find evidence that the majority of candidates had cropped the image to the specified size and saved this with the specified filename.

### Question 5

This question was well answered by the majority of candidates, creating the table to the specifications given and entering the text given. The accuracy of the text entry was not always of the same high standards with a number of typographical errors evident. Some candidates set appropriate alternate text for the image. A significant number did not set any alternate text. The alternate text should describe to a user what the image (that is missing) shows in a format that would be suitable for output using a text reader within the browser.

### Question 6

Many candidates answered this question well and identified FTP as File Transfer Protocol. The most common erroneous answer was FrontPage. Most candidates set this as style h2.

### Question 7

This question was not well answered, many candidates not adding anything in this cell, or adding requirements like a computer or the internet. Few descriptions related to FTP, most were general descriptions of items required to access the internet. It was clear from the quality of answers to this question that few candidates had first-hand experience of this process.

### Question 8

The stylesheet was often attached as specified to the webpage, although some candidates did not place this in the head section.

### Question 9

This question discriminated well giving a full range of marks from 0 to 18. Most candidates set the text alignment as specified and many set font sizes to the correct value, but some used pixels instead of points as the measurement of size. Many candidates were unable to 'centre align the table within the browser window. Few candidates used the most efficient methods by realising statements like font-size: 16pt and font-family:Arial, sans-serif; could be applied to more than one style in a single statement. A significant number of candidates included extra fonts, (particularly Helvetica), not in the specification. Frequently discovered errors included the use of incorrect syntax for the css comment which should have been placed at the top of the stylesheet and contain the candidate's name, Centre number and candidate number. Many candidates did not use the `/* */` to surround the comment, some used no notation, some used HTML comment markers and even JavaScript comment markers were seen by Examiners. A number of candidates did not save this with a filename containing their candidate number, or if they did save it in this format, did not attach this file to their web page. Many candidates who used the correct filename and attached the stylesheet to their web page got the correct priority by placing this stylesheet below the one attached in step 8.

A few stylesheet screenshots contained truncated lines of css, often omitting part of their definitions including the closing curly bracket `}`. Many of the screen shots submitted for both the browser view and the html were too small to read, even when enlarged with magnification devices.

### Question 10

The majority of candidates completed this step as specified.

### Question 11

This step was completed well by the majority of candidates, although some inserted only a single row.

### Question 12

Many candidates introduced data entry errors when inserting the text specified in this question. The most common errors were spelling, spacing and case errors.

### Question 13

The merge element of this question was frequently performed as specified, but a small number of candidates did not set a black background and/or set the text as a serif rather than a sans serif font. Some candidates appeared to have black text on a black background making it impossible to check for data entry errors.

### Question 14

This function was rarely completed as specified, most merged and aligned the cell contents but few candidates set this as a subtitle.

### Question 15

Most candidates completed this using a VLOOKUP function and obtained the correct results. Some candidates omitted FALSE or 0 and others used TRUE or 1 for the final parameter; which for an unsorted range of data did not give the correct results.

### Question 16

Most candidates who completed step 15 replicated their function as specified.

### Question 17

Most candidates successfully saved and printed their spreadsheet, but a number failed to display the row and column headings and/or set the column widths so that all data and formulae could be seen by the Examiner. A number printed the whole spreadsheet instead of the range specified.

### Question 18

Most candidates successfully printed their spreadsheet showing the values, but some candidates who had set row and column headings on for the formulae view did not turn them off again for this printout.

### Question 19

Many candidates completed this as specified, but a significant number of candidates did not resize the image whilst maintaining its aspect ratio and/or resize the row height as specified.

### Question 20

Many candidates completed this step as instructed.

### Question 21

Although a significant number of candidates completed this as specified there were a number of candidates who did not select all the data when sorting so did not maintain the integrity of the data during this process. Some candidates did not 'refine the extract' but appeared to use the original data.

### Question 22

This question resulted in a wide range of candidate solutions, Examiners were looking for solutions that would work for all data and would replicate in order to award full marks; solutions that gave the correct results but did not replicate or work for all data gained some credit. Most who attempted it did produce solutions with the correct answers. The labelling of the chart however was often found to be inadequate, with few candidates identifying clearly what the data represented (including the units used for the average download speeds). Appropriately labelled charts had a meaningful and detailed title, axis labels and axis titles.