

INFORMATION AND COMMUNICATION TECHNOLOGY

Paper 0417/11
Written Paper

Key Messages

Candidates appeared to have sufficient time to record all their answers with very few candidates failing to answer all questions. Many candidates seemed to struggle with the topic of batch processing and the reasons for using computer modelling often lacked detail. Many candidates did not appear to have an understanding, or experience of using command line interfaces and a surprising number of candidates found difficulty in comparing optical and magnetic media. The prevention of hacking was a topic that candidates seemed to only have a superficial understanding of.

Comments on specific questions

Question 1

The vast majority of candidates achieved full marks. A small number confused TFT and CRT monitors and a tiny number thought that the graph plotter was a scanner.

Question 2

The vast majority of candidates achieved both marks. Where errors were made it was usually as a result of choosing storage devices rather than input devices.

Question 3

The vast majority of candidates gained at least four marks. The question was generally well answered though a minority appeared to think spreadsheet software cannot be used to produce databases.

Question 4

The majority of candidates gained at least four marks on this question. Incorrect answers were evenly distributed among the five options. A small minority confused validation with verification.

Question 5

Candidates did very well on this question with most achieving at least two marks.

Question 6

The majority of candidates gained full marks on this question. Incorrect answers were spread evenly among the available options.

Question 7

Candidates scored very well on this question. Those that did not mainly failed to calculate the correct backward distance and/or putting LEFT instead of RIGHT.

Question 8

The majority of candidates gained at least half marks for this question, though many answered incorrectly from the point of view of the customer rather than the checkout-operator.

Question 9

Another well answered question. The vast majority of candidates gained full marks. A small number of candidates thought that the use of passwords would always prevent unauthorised access to data.

Question 10

This question was not very well answered overall, although the responses for part **(a)** were very slightly better than those for part **(b)**.

- (a)** A sizeable minority of candidates did not attempt this question. Candidates found it hard to gain the four marks available and most did not appear to understand batch processing. Of those that achieved marks it was usually because of giving the answer that data is processed all at once or that cheques are collected together. However, it was often clear from the answers, that candidates were often not aware of the practicalities giving responses such as “saving the cheques until the end of the month”.
- (b)** Again most candidates found difficulty in gaining all three marks. Most were aware of the concept of double booking but many incorrectly wrote about aspects of security. Despite achieving fewer marks on this part of the question more candidates attempted this part than attempted part **(a)**.

Question 11

Candidates did very well on this question with the majority gaining full marks. Very nearly all candidates managed to gain at least three marks. A minority thought that car workers would be paid less.

Question 12

This question was fairly well answered overall with the exception of part **(e)**

- (a)** Candidates did better on this part compared with the equivalent question last year. More able candidates scored very well. Most candidates gained some credit for identifying the purpose of the function.
- (b)** The vast majority gained the mark, though some gave USA as their answer.
- (c)** A majority of candidates gained at least half marks on what was a complex question. A number of candidates concentrated on the gender part of the function without referring to the record aspect. A number also gave a general overview of the formula without actually going into sufficient detail about what the formula did.
- (d)** The large majority of candidates gained the mark here though a surprising number gave incorrect responses.
- (e)** Most candidates struggled to make more than one point in their response. Many incomplete answers relating to cost and references to speed and accuracy were given.

Question 13

This question was not as well answered as the equivalent question last year. Part **(a)** was answered better than part **(b)**.

- (a)** Most candidates achieved at least three marks but a number did not give correct field names. Many candidates failed to get the mark for the hard disc field because they used ambiguous answers such as “memory size” which could have applied equally to the RAM or the disc. Candidates were more successful in naming the data types.
- (b)** The majority of candidates were able to describe at least two valid differences. Often, however, candidates were unable to provide sufficient detail in their responses to make it clear that they understood the point they were trying to make.

Question 14

This question elicited the weakest responses of any question on the paper. It was apparent that the majority of candidates had little or no understanding or experience of using a command line interface. This question was omitted by many candidates.

Question 15

This question was also, surprisingly, not very well answered. Generally most candidates were unable to identify more than one use and the reasons given were often incorrect. Many candidates incorrectly stated that an optical disc had a larger capacity than magnetic tape.

Question 16

This question was quite well answered with many candidates gaining at least one mark on each part. Most candidates were able to give examples of the different types of test data. Only the most able were able to give a good description of each type.

Question 17

For this question many candidates basically gave one word answers without elaborating on this despite the question asking them to describe the method. Although firewalls were mentioned frequently, marks could often not be awarded for that point because the candidate showed a basic lack of understanding of what a firewall actually does.

Question 18

Candidates generally gained marks for general descriptions of the two means of communication but found it difficult to elaborate on the features of either. Many made the same point over and over without going into sufficient detail as required by the mark scheme. Many candidates just reworded the question and argued that both were good methods of communication.

INFORMATION AND COMMUNICATION TECHNOLOGY

Paper 0417/12

Written Paper

Key Messages

Candidates appeared to have sufficient time to record all their responses with very few candidates failing to answer all questions. The tendency continued where some candidates learnt answers from previous mark schemes off by heart, although this was less evident than in previous years. This led to some strange answers particularly on **Question 12a** where these candidates described methods of implementation rather than methods of research. This practice can cause candidates to lose many marks as they clearly do not necessarily understand the concepts they are memorising. The wide scope of applications employed in questions on this paper meant that candidates were unable to achieve high marks unless they had revised thoroughly.

Some candidates answered the question on electric funds transfer very well but a number appeared to find this topic difficult. A lot of candidates seemed to struggle with the concepts of user interfaces, validation and wireless technology.

Comments on specific questions

Question 1

The vast majority of candidates achieved full marks although a minority thought the sensor was a microphone.

Question 2

Most candidates achieved both marks for correctly identifying the output devices. A small minority identified input devices instead of output devices; very few identified a storage device.

Question 3

The majority of candidates gained full marks. However, a number of candidates answered the laser printer incorrectly.

Question 4

The vast majority of candidates achieved all four marks on this question. The most frequent omission (for those that did not achieve full marks), was Switch with other incorrect answers being spread between the remaining discriminators.

Question 5

Considering this topic is normally a difficult one for candidates to grasp, the question was relatively well answered with most candidates achieving at least three marks. The incorrect answers tended to be weather stations and washing machines.

Question 6

The majority of candidates were able to achieve high marks on this question with many achieving full marks. The most common incorrect statement was made by candidates who used the LEFT command instead of RIGHT.

Question 7

Candidates scored well on this question. Those that did not seemed to confuse the use of CD ROMs with tapes. A further, rather surprising, number of candidates thought that magnetic tape would be used for real time applications.

Question 8

The majority of candidates achieved at least two marks for this question. Non-volatility and the storage of the BIOS were the most popular answers. Many candidates wrote about size of storage capacity or confused ROM with the features of RAM.

Question 9

Most candidates achieved marks for this question but there were a number of incomplete answers. Many candidates assumed there would be no workers instead of stating there would be fewer workers resulting in a lower wage bill.

Question 10

Overall, this question was well answered; although part **(a)** was answered better than part **(b)**.

- (a)** Most candidates achieved all four marks.
- (b)** Most candidates were able to achieve one mark. Several achieved two marks though a number of candidates either omitted to answer this question or just appeared to guess at applications.

Question 11

Most candidates found difficulty with this question. Many were able to make one point about commands but most failed to achieve more than this one mark. They gave vague answers without making specific mark points. A large number of candidates just wrote about the features of a WIMP environment without saying what the advantages were.

Question 12

Candidates did very well, on the whole with this question.

- (a)** Most candidates were able to describe the methods quite well with at least two marks being awarded to them. A surprising number, despite being asked to describe the methods, gave one word answers.
- (b)** Again, candidates did well on this part with many achieving full marks. A small number were unable to name 'visual' verification but most answered double data entry. The majority gave good descriptions. More candidates omitted to answer this question than almost any other question on the paper.
- (c)** Candidates found most difficulty with this part of the question. Many were unable to explain why both are needed. Marks were really only achieved by those candidates who explained either the purpose of verification or the purpose of validation. Few could articulate the need for both.

Question 13

Most candidates gained some credit for this question with many achieving at least half marks. Part **(a)** was answered very well with many candidates gaining at least two marks but part **(b)** was not answered as well, though most candidates achieved at least one mark.

- (a)** The majority of candidates did well on this question making at least two valid points.
- (b)** Most candidates described the method of using an antivirus but some only gave one word answers. The actual act of using or installing an antivirus was sometimes omitted thereby failing to

answer the question which required candidates to 'describe'. Other answers tended to be rather vague with a number of candidates thinking that encryption would be an effective method.

Question 14

This question was quite well answered with most candidates achieving marks on each part.

- (a) Candidates produced better responses than for a similar question last year. A number of candidates gained some credit for identifying the purpose of the function. However, fewer than half the candidates were able to explain how the VLOOKUP function worked in this cell.
- (b) The majority of candidates answered this correctly.
- (c) This part of the question was answered better than part (a) with the majority of candidates achieving at least two marks. Candidates showed a good understanding of the COUNTIF function.
- (d) Again, as with (b) most candidates answered this correctly.
- (e) Again, this part of the question was answered better than part (a). However, a number of candidates lost marks for putting 'Yes' instead of 'Y' and 'No' instead of 'N'.
- (f) Most candidates achieved the mark but some candidates gave 'No' instead of 'N'.

Question 15

Candidates generally did very well on the first part of the question but not so well on part (b).

- (a) The large majority of candidates achieved at least five marks.
- (b) Validation appears to be a topic that candidates struggle with. Many appear not to understand the different checks. A sizeable minority of candidates often did not include examples from the data given in the introduction to the question. A surprising number confused format check with type check. The use of a format check was inappropriate for much of the data provided.

Question 16

This question proved to be the most challenging for candidates. Many candidates failed to adequately give the disadvantages of wireless networks compared with cabled networks. Many wrote about wireless networks could be hacked without realising that cabled networks can be as well.

Question 17

The majority of candidates made at least one good point on this difficult question. Some candidates, at times, appeared to be contrasting LAN and WAN instead of an intranet and the Internet. Most candidates grasped the concept of size but frequently repeated this in different points.

Question 18

This question tended to be answered very well by the most able candidates. A number of candidates, however, failed to describe electronic funds transfer and wrote about stock control. Some candidates even wrote about ATMs relying on answers to a question in a past paper.

INFORMATION AND COMMUNICATION TECHNOLOGY

Paper 0417/13

Written Paper

Key Messages

Candidates appeared to have sufficient time to record all their responses with very few candidates failing to answer all questions.

Once again, many candidates seemed to find expert systems and microprocessor control difficult to grasp. Candidates' understanding of computer networks and software copyright also seemed a little weak.

The tendency of some candidates to learn answers from previous mark schemes off by heart continued but, thankfully, to a lesser extent. This led to many strange answers particularly on **Question 11** where these candidates described how to create an expert system rather than how one would be used. This practice can cause candidates to lose many marks, as they clearly do not necessarily understand the concepts they are memorising. The wide scope of applications employed in questions on this paper meant that candidates were unable to gain high marks unless they had revised thoroughly.

Comments on specific questions

Question 1

The vast majority of candidates gained full marks, though a small number gave 'CRT monitor' rather than 'Mainframe computer' and 'microphone' rather than 'PDA'.

Question 2

Virtually all candidates gained both marks.

Question 3

The vast majority of candidates gained at least four marks. The question was generally well answered though the use of DTP software to create models was given by some candidates as true.

Question 4

Candidates did reasonably well on this question with the majority gaining at least two marks. Common incorrect answers referred to normal/abnormal/extreme data or to methods of data verification. In addition, a number of candidates gave the incorrect answer 'Format check'.

Question 5

The vast majority of candidates gained full marks.

Question 6

Nearly all candidates gained full marks.

Question 7

Candidates scored very well on this question though the meanings of PENUP and PENDOWN were often not accurately described. Some candidates, despite the question stating that no two lengths were the same, gave REPEAT and ENDREPEAT as instructions.

Question 8

The majority of candidates did not do as well on this question as expected. There were many strange definitions of OCR including Optical Card Reader as well as Optical Chip Reader. Even when the correct name was given, candidates frequently went on to describe OMR or MICR. Examples were often omitted.

Question 9

This question was quite well answered. However, candidates did a lot better on part **(a)** than part **(b)**.

- (a)** Virtually all candidates gained full marks.
- (b)** Candidates did not do as well on this part. Saving in costs of printing and distribution were most common correct responses. A significant number repeated (from **9a**), the use of video, sound and hyperlinks, despite the question asking for 'other' reasons. Many simply suggested that "students use computers".

Question 10

This question was quite well answered with the bulk of candidates gaining at least half marks. Most common correct points were 'one author', personal opinions, online journal/diary, readers can comment / not edit. However, some answers were rather vague and it was difficult at times to see whether the candidate was referring to the author or a visitor to the site.

Question 11

This question was not very well answered. A significant number of candidates wrote about the design of an expert system. Many candidates mentioned inference engine, knowledge base and rules base but seemed to have little idea how they related to one another. Once again, answers tended to be rather vague.

Question 12

This was the question that most candidates had difficulty with. It seemed that they had not prepared themselves for this part of the syllabus.

- (a)** Answers tended to be too vague. Many candidates gave answers for keypad such as to enter text or numbers or commands. The answers for the sensor were also quite vague with few giving current temperature. A significant number thought the sensor controlled the process or that it only fed back changes in temperature rather than the temperature itself.
- (b)** Candidates seemed unaware that a sensor does little more than send data to the microprocessor. It does not control any aspect of the process. Answers, on the whole, were too vague. The microprocessor, very frequently, was not mentioned. There was frequently a lack of clarity between the preset value of the temperature and the value input from the sensor. Many responses which showed some understanding often tried to write too much in a single sentence, e.g. "the microprocessor compares the temperatures and switches the heater on or off." They should be encouraged to describe each step in the system and state exactly what it is they are comparing and exactly which number is higher/lower than the other. A significant number of candidates omitted this question.

Question 13

Candidates did very well on this question, though part **(a)** was answered better than part **(b)**.

- (a)** A large majority of candidates gained at least four marks with many getting full marks.

- (b) Many candidates scored well on this question. Candidates seemed to fall into two camps. One knew the topic well and consequently gained a substantial number of marks or they did not know it at all and could achieve only a few marks. It was not uncommon for 'User Documentation' to include 'user manual' or 'instructions for use' given as items. A number of candidates referred to the 'zoo' scenario with mention of animal details etc. without addressing the requirements of the question.

Question 14

This question was quite well answered. The majority of candidates gained at least half marks. Most common correct answers included portability, smaller screen, keypad and battery life. Unfortunately, many candidates who referred to access implied that the Internet was available everywhere regardless of whether there would be a signal. Comments relating to cost of hardware and running costs were not infrequent.

Question 15

Candidates generally did very well on this question though not as well in part (f).

- (a) Most candidates gained at least two marks. A small number of candidates gave an overall description rather than describing the function.
- (b) The vast majority of candidates achieved the mark.
- (c) Most candidates gained both marks though weaker candidates tended to gain just one mark. These candidates usually repeated the word 'SUM' from the formula, not demonstrating that they understood what this function did.
- (d) Candidates did not do as well on this part as the preceding parts. Most gained at least one mark, with the more able candidates gaining all 3. Candidates sometimes wrote about cells D3 to F3 instead of D4 to F4. A significant number of candidates interpreted <> literally and wrote 'greater than or less than (NT)' rather than "not equal to".
- (e) The vast majority of candidates gained the mark. The most common incorrect answer was 0.
- (f) This was the part of the question that most candidates struggled with. Less than half the candidates achieved one mark or more. A number of candidates gained one mark for stating that the simulation could model weather conditions or flying the plane.

Question 16

Candidates did not do particularly well on this question with candidates struggling on both parts.

- (a) Most candidates mentioned blocking certain websites. Marks were also earned for 'acts as web server', 'acts as buffer' and 'stores webpages'. Candidates frequently confused the proxy server with a router.
- (b) Most candidates gained a mark for knowing that a router connected a LAN to the Internet. Reference to transfer of data packets was rare. There was a tendency to refer to wireless networking, e.g. 'connects to a WLAN'

Question 17

This topic seemed to be unfamiliar to most candidates.

- (a) Two marks were not awarded very often. Most candidates just rephrased the words copy and right without making an accurate explanation. Few mentioned lawful protection or the creators of the software.
- (b) Again it was rare to see two marks awarded. The use of a dongle or the original media and activation codes were the most popular correct answers. It was disappointing to see that a number of candidates still think that Read-Only media prevents copying.

Question 18

This question enabled the majority of candidates to gain marks. Some candidates, however, ignored the word 'company' in the question and gave general answers relating to workers as well. Frequent valid points referred to initial and maintenance costs, greater accuracy, increased productivity, continuous working and the ability to work in a hazardous environment. There were, however, a number of misconceptions including the company would not need human workers, workers do not need payment, robots do not make mistakes and humans cannot work at night or for long periods.

INFORMATION AND COMMUNICATION TECHNOLOGY

Paper 0417/21
Practical Test A

General

Overall the paper did not seem to be more difficult than in previous years. The instructions given were clear and if candidates read carefully and produced what was asked for, they achieved high marks. Overall the paper is very good at testing the practical skills of the candidates and enabling those with excellent skills to show their ability whilst allowing the weaker candidates to score some marks. It is producing a good range of marks and differentiates well.

A key message for teachers/tutors when preparing candidates for the examination is to advise them to READ THE QUESTIONS and to do exactly what they are asked to do. For instance, when typing or inputting data, copy exactly what is on the examination paper carefully. Many candidates lose marks for careless mistakes; typing errors, all details not being visible, not doing exactly what it asks on the paper. Some candidates mix up left and right and some do not understand the difference between a serif and a sans-serif font.

Printed evidence

A significant minority of candidates, after recording on the question paper the completion of many document tasks or the collection of evidence in a document, did not present printed evidence for these tasks. A missing document could deprive the candidate of approximately thirty marks. A missing or incomplete evidence document would reduce achievable marks by even more. There was never an explanation in the assessment record folder of why such evidence was not produced. It would be a good idea in preparation of candidates to remind them to print materials as the end of the examination approaches even if some tasks are incomplete. A warning of the approaching end of the examination might be given at an appropriate time by examination Supervisors. Most candidates ensure their personal details appear printed on every page submitted, since they are aware that work cannot be marked unless this is the case. A minority of candidates do not successfully insert their name onto a report and so lose marks. This would be unnecessary if they printed their report onto a page containing header or footer information to identify them if unable to create the necessary control in their report.

Contact List and Email addresses

Steps 2 and 3 The majority of candidates correctly stored and displayed the contact details, although capital letters on names were sometimes incorrect. Many candidates correctly created a distribution list. This was a task that had not been tested before, so it was good to see a large proportion of candidates tackling it well.

Document editing

Steps 4 to 26 Many candidates still seem unable to distinguish between serif and sans serif fonts for the title and subtitle and body text. Candidates were asked to provide a screenshot for margin settings and this was a great help in ensuring that margins were set correctly.

The file was to be saved with a new name and this new name should have appeared in the header details. Header and footer items were usually well done, but not always aligned correctly to the margins.

Change of page layout after the subtitle was usually done as specified to create three columns with a 1.5 cm gap. Body text specifications were usually met and applied throughout the text.

The new subheading was usually entered correctly and in the specified place. There were a lot of subheadings in the body text and many candidates failed to locate all of them and format as specified.

An appropriate image was usually found and inserted in the first paragraph with text wrapped, although it was often not aligned correctly and was sometimes not resized with aspect ratio maintained.

A few candidates did not use square shaped bullets, but on the whole this was well done, although occasionally not all 5 lines of text were set correctly with the top line being formatted as a subheading.

The table in this document was very well done by most candidates with only a small number being penalised for data entry errors.

Database structure and report

Steps 27 and 28 Almost all candidates provided the file structure screenshot with correct field names and types. In the setup, the numeric field format to display one decimal place was not fully understood as seen in resultant printouts of the report. The logical field display was specified to be Yes/No only. Other display formats were not accepted.

Steps 29 to 33 Records were usually selected correctly and often sorted using the two specified criteria. The column width in the report was frequently not wide enough to display all labels and data in full. A great many candidates did not present the columns in the correct order as specified. The setting of 1 decimal place in the columns Distance, Height and in the calculated column Turbine_Capacity was often incorrect, and had sometimes been set to integer format which did not display the record with decimal values correctly. The label Turbine_Capacity was sometimes shown with a space and without the underscore as required. The runtime calculation for this field was usually correct. The calculation for total number of turbines was not correct on many scripts showing instead the total number of records or the total of turbine capacity. The label for this calculation often contained errors, most frequently the additional use of capital letters. The title of the report was usually correct, although sometimes not displayed in full.

Integration and document finalisation

Steps 34 to 36 When present, the database extract frequently showed the correct records, but was not always presented with the records sorted or the fields selected in the order specified. It was usually placed correctly in the document and set within the margins.

Steps 37 and 38 Paragraph spacing between paragraphs, after the headings and also above and below lists and inserted tables in the text were frequently not consistent. Checking this consistency is a task for the proof reading stage of the paper.

Presentation

Steps 39 to 48 This task caused several problems as some candidates did not set up a master slide correctly so that not all 5 required elements were shown. The correct style of font for the title was sometimes incorrect. Candidate details were frequently not in a serif font and some did not include all elements on the master slide.

The correct slide was deleted and the replacement slide moved by almost all candidates.

The chart data was usually correctly identified and a vertical bar chart created and labelled. The chart did sometimes have errors in the titles and legend and some candidates produced a horizontal bar chart. The chart was not always placed to the left of the bullet points on the final slide.

Almost all candidates printed the 6 slide layout and the single slide correctly.

Email

Steps 49 to 51 Many candidates used incorrect capital letters in the subject text. The word “attached” in the body of the email was frequently misspelt. There was the perennial error when candidates failed to include the final full stop in the text message. Some candidates attached a database file instead of the document.

Steps 1 and 52 Evidence documents were much better again this time. Screenshots were of a size that made it easy to see what candidates had done. However, as in previous years, the quality of printing from some Centres was very poor and in some cases unreadable. The evidence document suffered most from this, as candidates tried to fit too many screen prints on one page. If these were very small and data was not displayed clearly enough to be read with the naked eye, then it could not be marked.

Administration issues

Many Centres persist in stapling prints in the ARF – on occasions up to 7 or 8 staples per script or even in two rows. Marking is then difficult as all printed evidence may not be visible without having to remove all staples. This should be avoided in future submissions. Other Centres use hole-punches which occasionally go through text, and scripts are secured with string/treasury tags.

INFORMATION AND COMMUNICATION TECHNOLOGY

Paper 0417/22
Practical Test A

General

Overall the paper did not seem to be more difficult than in previous years, although there were some changes included in the way familiar skills were tested. The instructions given were clear and if candidates read carefully and produced what was asked for, they achieved high marks. Overall the paper is very good at testing the practical skills of the candidates and enabling those with excellent skills to show their ability whilst allowing the weaker candidates to score some marks. It is producing a good range of marks and differentiates well.

A key message for teachers/tutors when preparing candidates for the examination is to advise them to READ THE QUESTIONS and to do exactly what they are asked to do. For instance, when typing or inputting data, copy exactly what is on the examination paper carefully. Many candidates lose marks for careless mistakes; typing errors, all details not being visible, not doing exactly what it asks on the paper. Some candidates mix up left and right and some do not understand the difference between a serif and a sans serif font.

Printed evidence

A significant minority of candidates, after recording on the question paper the completion of many document tasks or the collection of evidence in a document, did not present printed evidence for these tasks. A missing document could deprive the candidate of approximately thirty marks. A missing or incomplete evidence document would reduce achievable marks by even more. There was never an explanation in the assessment record folder of why such evidence was not produced. It would be a good idea in preparation of candidates to remind them to print materials as the end of the examination approaches even if incomplete. A warning of the approaching end of the examination might be given at an appropriate time by examination Supervisors. Most candidates make sure their personal details appear printed on every page submitted since they are aware that work cannot be marked unless this is the case. A minority of candidates do not successfully insert their name onto a report and so lose marks which would be unnecessary if they printed their report onto a page containing header or footer information to identify themselves.

Contact List and Email addresses

Steps 2 and 3 The majority of candidates correctly stored and displayed the contact details, although some did not show the job title and capital letters on names and job titles were also sometimes incorrect. Many candidates correctly created a distribution list. This was a task that had not been tested before, so it was good to see a large proportion of candidates tackling it well.

Document editing and presentation

Steps 4 to 18 Page layout, orientation and column change was generally well executed.

There is confusion among some candidates about serif and sans serif fonts. Many candidates formatted the body text correctly and the sub-title, but the main title to the document was often not in a serif font. In the title, italics were sometimes not applied to the specified text only. The word "but" was sometimes not formatted. Occasionally all of the title text was italicised.

Evidence of the settings for margins, paper sizes and orientation almost always showed these to be correctly set. The screenshot evidence was introduced to

overcome the problems that can result from printer scaling, producing apparently incorrect margin settings despite them being correctly identified.

Finding an appropriate and acceptable image was successfully completed by many candidates. Placement of the image was also well done, however quite a number of candidates did not resize this as specified to about half the column width.

Headers and footers, unusually, did not have to be aligned to the margins but this did not seem to be a problem for candidates. If present, the most common error was not to provide the full path for the file or provide evidence of saving the file with a new name.

Database Structure

Steps 19 to 21

These were generally well done. A new departure in this paper was in the requirement for candidates to create the record structure themselves and then import the data. Field names had to be created and this was generally well done. Setting a primary key field did not present a problem to many candidates although this was the first time it had been tested. The setup of the numerical fields sometimes led to additional marks being lost. If the field was set as integer format, the required decimal values were not displayed. Figures for size and price fields were occasionally rounded.

Adding records

Steps 22 to 24

The three new records were usually correctly added, but if incorrectly set up, the *Size* field might not be displayed as specified (i.e. it might be displayed as an integer, losing accuracy). A number of candidates omitted the first record during the import, and ultimately lost the mark for all data displayed. Others did not amend column widths to display all data in the 12 columns.

Database Report 1

Steps 25 and 26

The Euro symbol was frequently not shown on all required data. The sorting of the records was based on two criteria and these both needed to be present. Sorting was sometimes incorrect as the 3 new records were left at the end of the report. The new records needed to be input with no errors. The *Gb_s* field was not formatted to 1 decimal place on a majority of scripts resulting in the mark for this being lost in the evidence structure print.

The new field which provided a calculation for the Price per GB was very well done by most candidates. Success in this calculation only affected the later search for the two records to be inserted in the table in the document.

Candidates should be made aware that reports which run to many pages or include all records in the database probably contain selection errors. Reports are unlikely to be more than two or three pages at most if correctly selected. A preview of a report should alert the candidate to check back for accuracy in their selection criteria against the requirements of the paper.

Database Report 2

Steps 27 and 28

The data from the first report was correctly refined by a large number of candidates. This was a new way to show a progression through the selection of records, but did not seem to present a problem for many candidates. Some did not, apparently, make a new query based on the former one and used this selection for their first report and so excluded all the HDD records in that report. On the whole this report was well done, although the *Stock_item* column was sometimes omitted. The sort on Price was occasionally in ascending not descending order. Candidate details were sometimes shown at the bottom of the report not at the top as required. Success in presenting this report also did not depend on successful calculation of the Price per GB of each drive.

Document integration

Steps 29 and 30 The database extract was generated and correctly inserted by a large number of candidates. A common error was that the sort function was not carried out correctly. It did not depend on success in calculating the Price per GB for each drive, so could be completed without that calculation being made.

Steps 31 to 35 Inserting records into the table.

Only a few candidates correctly identified the 2 records from the database. This search of the database was a new task, not set before and did depend on successful calculation of the Price per GB in the first report, so was intended to be a test for the highest levels of skills. The inserted text was intended to be matched to the font of the main document and follow through credit was given if the body text font was incorrectly applied. Formatting of the table/text was generally well done. However, it was noted that some candidates who did not identify the records also did not format the table; losing marks they could have gained.

Checking and proof reading

Steps 36 and 37 There were two spelling errors to identify and correct. While widows and orphans control is generally handled by the software, proof reading is expected to identify subheadings left at the end of columns of pages, with candidate action required to rectify this. Consistent spacing between paragraphs was not correctly applied on a large number of scripts. Checking for this consistency should be one of the tasks of proof reading the document before final printing.

Presentation

Steps 38 to 46 This was well done by many candidates. Errors were usually for not changing the layout on slide 1 to title and subtitle (no bullets and centred), omission of slide numbers or printing individual slides rather than a hand-out print. Some candidates did not show sufficient evidence of transitions to the slides and/or animations on the bullet points.

Email

Steps 47 to 49 Many candidates did not show the Editorial team as a carbon copy as the software used to show evidence of the email did not show separate lines for To and cc, but simply displayed all recipients on one line, even though they may have been correct on the actual email. This may be a feature of a common messaging software in use. Incorrect use of capital letters in the subject or message text also meant marks were lost. Some messaging software displayed the members of the group instead of the group name, and, if the group had been seen to be created, then these recipients were accepted to be evidence of attaching the group. Many candidates did not enter the text 100% correctly and the full stop at the end was more often than not omitted. This is a reminder to follow instructions carefully and accurately.

The evidence document

Steps 1 and 50 As in previous years, the quality of printing from some Centres was very poor and in some cases unreadable. The evidence document suffered most from this, as candidates tried to fit too many screen prints on one page. If these were very small and data was not displayed clearly enough to be read with the naked eye, then it could not be marked.

Administration issues

Many Centres persist in stapling prints in the ARF – on occasions up to 7 or 8 staples per script or even in two rows. Marking is then difficult as all printed evidence may not be visible without having to remove all staples. This should be avoided in future sessions. Other Centres use hole-punches which occasionally go through text, and scripts are secured with string/treasury tags.

INFORMATION AND COMMUNICATION TECHNOLOGY

Paper 0417/31
Practical Test B

Key Messages

Overall, there were slightly fewer candidates achieving excellent results on this paper than in previous sessions. The paper gave a good spread of marks. In previous sessions, for a significant number of candidates, the website authoring section of the paper was their strongest element, but in this session the candidates were required to correct an erroneous cascading stylesheet which was not completed as well as in previous sessions where they had to create their own styles.

In general, candidates appeared well prepared for this examination and the vast majority who submitted their work showed sound knowledge, skills and understanding with the majority of candidates completing all elements of the paper. Results were very often centre-based. There is evidence that some candidates are rote-learning sets of skills to pass the practical examinations, rather than having the underlying knowledge and understanding to underpin these skills and allow the skills to be applied in any context. This may have been the reason that fewer candidates achieved excellent results on the stylesheet question. There were a significant number of typographical errors in both the website and spreadsheet elements of the paper. Many of these inaccuracies could have been avoided with more careful checking and correction.

Centres **should not** staple the work or tie it together with string, nor should scripts be punched and tied with string – a few candidates lost marks because the holes ‘took out’ some of the header text being marked. Occasionally, scripts were tied in the middle of the pages making them difficult to open/turnover for marking. Work should be submitted in the ARF along with the question paper; both the ARF and question paper should have hand written on it, the candidate’s name, Centre number and candidate number. The date that the candidate sat the examination should also be recorded on the question paper. It is essential that **ALL** candidates adhere to these instructions.

A small, but significant number of candidates did not print their name, Centre number and candidate number on every document submitted for assessment. It is important that candidates do this, as without clear **printed** evidence of the author of the work, marks cannot be awarded by the Examiner for these pages. It is not acceptable for candidates to hand annotate their printouts with their name as there is no real evidence that they are the originators of the work. A number of candidates omitted one or more of the pages from the required printouts. Some candidates submitted multiple printouts for some of the tasks and as instructed crossed out those printouts that were draft copies. If multiple printouts are submitted without draft versions being crossed through only the first occurrence of that page will be marked.

Most candidates presented evidence of their amended cascading stylesheets (and sometimes their spreadsheets) in printouts that were produced with fonts so small it was difficult for Examiners to read. Candidates should check each print to ensure it is large enough to be read with the naked eye, and if necessary restyle/reprint accordingly. Where Examiners are unable to read the materials presented they cannot award candidates the marks. Similarly, some candidates did not achieve marks as a result of presenting screen shots where part of the text was obscured by another overlaid window, for example: where part of the stylesheet was overlaid by a window containing a list of files.

Comments on specific questions

Question 1

The majority of the candidates created the evidence document successfully.

Question 2

The majority of the candidates created the folder as specified.

Question 3

Almost all of the candidates downloaded the required images and stored them in the required folder.

Website Authoring

Question 4

This was a different style of question to those found in previous sessions which required the candidates to amend a stylesheet containing errors. Most candidates successfully opened the stylesheet and achieved some marks but few were careful in their checking of the .css syntax. It was clear that only a few candidates had checked that the styles worked in their webpage.

Question 5

The majority of the candidates saved the stylesheet successfully, although some candidates ignored the instruction to rename the file to include their candidate number. Some candidates did not save the file with the .css file extension.

Question 6

Almost all candidates added this screen shot to their evidence document but in many cases the font size of the styles was so small it was very difficult to read. Despite an instruction to: "Make sure that the filename is clearly visible", a number of candidates did not do this.

Question 7

The majority of the candidates completed this step successfully.

Question 8

The majority of the candidates completed this step successfully. A small number of candidates erroneously embedded the css within the head section of the page rather than attaching an external stylesheet. Other candidates placed the attached stylesheet outside the head section.

Question 9

The majority of the candidates completed this step successfully.

Question 10

The table border was set to 2 by almost all candidates, but far less completed the cell padding correctly. The most common error was where candidates had entered cell padding rather than cellpadding.

Questions 11 to 13 and Question 15

Each of these questions required the candidates to select the most appropriate images from those downloaded. The majority of candidates completed this correctly; those who found this more challenging could have used the Internet to look at typical houses and businesses for sale in the Dominican Republic (or other similar Caribbean Islands) to help them make their choices. A small number of candidates placed the images in the correct cells but did not replace the text as required by the question paper.

Question 14

The majority of candidates used the third image to create a hyperlink. Some candidates used an absolute file path for the hyperlink reference which would not function correctly in most computers when the webpage was uploaded to a web server. A number of candidates did not set the target window as specified to "_farm". A small number of candidates set up this hyperlink and the correct target window but did not create it from this image, some placing the <a> and tags together so the link could not be accessed.

Question 16

This question was performed well by most of the candidates who attempted it. There were some candidates who resized the image widths and left the original heights therefore changing the aspect ratio and distorting the image.

Question 17

The majority of candidates used the text "Sales Team" to create the hyperlink and therefore achieved the first mark. Most candidates correctly included the href="mailto: command with the correct email address. Many candidates attempted the subject line with the correct leading "?" but the vast majority did not replace the space in the subject line text "Property enquiry" with the correct %20 to force the spacing and ensure that this would work in all eventualities. Some errors made by candidates would have been avoided if they had tried the hyperlink to check that it opened their email software and set all elements as specified in the question paper.

Question 18

A small number of candidates from a range of centres did not correctly print the browser view as a screenshot. A number of candidates omitted the html printout completely.

Question 19

The majority of candidates completed this step successfully.

Question 20

Many candidates completed this step successfully, although there were more occurrences of absolute file paths evident in this question than in step 8. Where candidates had erroneously embedded the css within the head section of the page in step 8, tended then, to repeat the error on this webpage, rather than attaching an external stylesheet.

Question 21

Most candidates who submitted evidence for this step set the correct table format with 3 rows and 2 columns. Columns were frequently merged in rows 1 and 2 to obtain solutions like the image provided in the question paper.

Question 22

Although many candidates attempted to enter these 6 words of text, there were frequent errors in capitalisation, punctuation (with the exclamation mark omitted) and in the failure to insert a line break after the first 2 words. A small number of candidates entered the text but missed the final instruction to set this as style h1.

Question 23

Many candidates placed the image used in step 13 into the correct table cell but not all candidates had cropped and saved the image before placing it in the table.

Question 24

The majority of the candidates completed this step successfully although there were issues with the application of the paragraph style, typographical and case errors from a small number of candidates.

Question 25

The majority of the candidates completed this step successfully although there were some candidates who did not apply style h3 to this text.

Question 26

The majority of the candidates completed this step successfully.

Question 27

A small number of candidates from a range of centres did not correctly print the browser view as a screenshot. A number of candidates omitted the html printout completely.

Data Analysis

Question 28

The majority of the candidates completed this step successfully.

Question 29

The vast majority of the candidates completed this step successfully, a small minority of candidates replaced the contents of row 1 rather than inserting a new row.

Question 30

There were a number of variations seen for this data entry, whilst most candidates entered the town of Bavaro, other suggestions such as Bavaria and Bravo were offered by candidates. A number of candidates had not used the correct initial capitalisation.

Question 31

The majority of the candidates completed this step successfully.

Question 32

The majority of the candidates completed this step well although there were a number of transpositions between left and right and some inaccuracies in the data entry for "Last revision on". A significant number of candidates entered the text "Last edited by" which was text from a previous examination question.

Question 33

A number of candidates did not extract the correct distances from the centre of Bavaro for each of these properties using the supplied webpage. This led to some inaccuracies in final totals later in the candidates' answers.

Question 34

Many candidates completed this step successfully but there were also a significant number of different incorrect methods used. An error noticed a significant number of times, was where candidates had printed the spreadsheet after attempting the modelling from **Questions 45** and **46**, so the Examiner was not shown the original formula. Instead they were presented with 150 + 2% multiplied by the cell containing the price of the property. Some candidates found the calculation to find 2.5% of the property price difficult, with multipliers such as .25 and .5 being used rather than 0.025.

Question 35

Many candidates completed this step successfully; however the logic required for the second step of the nested IF appeared to cause some candidates a few issues. If candidates had already tested for one condition (for example: =IF(d3<5...)) then the second condition within the nested IF did not require that test again. This was not penalised and where candidates had shown higher level skills to achieve the correct answer, for example, =IF(d3<5,2,IF(AND(d3>=5,d3<15,5,10))) then credit was given, but many candidates attempted answers for this section like ...IF(5=<d3<15,...) which was not given credit. Many candidates set the contents of the cell as text with =IF(d3<5,"2"...)) rather than =IF(d3<5,2...) while others used text values as the parameter for the condition statement, =IF(d3<"5",...) This caused problems with formatting for some candidates in **Question 37**.

Question 36

Many candidates did not use correct formulae to calculate the profit. There were a variety of correct solutions seen including $=c3-e3*f3-g3$ and $=c3-(e3*f3+g3)$.

Question 37

Some candidates did not work out which cells were those containing currency values and which contained other values. Most errors occurred when candidates set currency with 2 decimal places (in \$) to columns b, c, g and h but omitted column e. A few candidates erroneously expressed the currency in other currencies rather than in dollars.

Question 38

The majority of the candidates completed this correctly.

Question 39

Despite a clear instruction to place this formula in cell H41, a significant number of candidates placed their formula in cell G41. Most candidates who attempted this got the correct SUM function and range of cells but few rounded their answer to 0 decimal places. A significant number of candidates had errors using INT (which only works for this question if the candidate added 0.5 before the integer is calculated), other incorrect responses included the use of ROUNDUP and ROUNDDOWN functions.

Question 40

This step was omitted by a significant number of candidates.

Question 41

This step was omitted by a number of candidates who printed a copy of their values printout in the correct layout but failed to show the formulae and functions used. Some candidates did not print to a single page wide and the most common omission from those submitting this printout was the failure to select columns wide enough to show the Examiner all of the formulae entered. Where Examiners cannot see all of the formulae they cannot award marks to the candidate. Very few candidates' inserted row and column headings in their spreadsheet print out

Question 42

The majority of the candidates completed this correctly.

Question 43

A number of candidates did not attempt this question, although most that did, completed this correctly. A very small number extracted these rows rather than changing the relevant cells.

Question 44

The majority of the candidates completed this correctly.

Question 45

The majority of the candidates who attempted this question and submitted printouts completed this correctly.

Question 46

The vast majority of the candidates completed this correctly.

Question 47

Almost all candidates printed the evidence document.

INFORMATION AND COMMUNICATION TECHNOLOGY

Paper 0417/32
Practical Test B

Key Messages

There were slightly fewer candidates achieving excellent results on this paper than in previous sessions, with the paper giving a good spread of marks. In previous sessions for a significant number of candidates, the website authoring section of the paper was their strongest element, but in this session the candidates were required to correct an erroneous cascading stylesheet. This was not completed as well as in previous sessions where they had to create their own styles.

In general, candidates appeared well prepared for this examination and the vast majority who submitted their work showed sound knowledge, skills and understanding with the majority of candidates completing all elements of the paper. There were vast differences in the range of results from Centre to Centre. There is evidence that some candidates are rote-learning sets of skills to pass the practical examinations, rather than having the underlying knowledge and understanding to underpin these skills allowing them to be applied in any context. This may have been the reason why fewer candidates achieved excellent results on the stylesheet question. There were a significant number of typographical errors in both the website and spreadsheet elements of the paper. Many of these inaccuracies could have been avoided with more careful checking and correction.

Centres **should not** staple together the work. Work should be submitted in the ARF along with the question paper. Both the ARF and question paper should have hand written on it the candidate's name, Centre number and candidate number. The date that the candidate sat the examination should also be recorded on the question paper. It is essential that **ALL** candidates adhere with these instructions.

A small but significant number of candidates did not print their name, Centre number and candidate number on every document submitted for assessment. It is important that candidates do this, as without clear **printed** evidence of the author of the work, marks cannot be awarded by the Examiner for these pages. It is not acceptable for candidates to hand annotate their printouts with their name as there is no real evidence that they are the originators of the work. A number of candidates omitted one or more of the pages from the required printouts. Some candidates submitted multiple printouts for some of the tasks and, as instructed, crossed out those printouts that were draft copies. If multiple printouts are submitted without draft versions being crossed through only the first occurrence of that page will be marked.

Most candidates presented evidence of their amended cascading stylesheets (and sometimes their spreadsheets) in printouts that were produced with fonts so small it was difficult for Examiners to read. Where Examiners are unable to read the materials presented they cannot award candidates marks. This presented a significant problem during this session.

Comments on specific questions

Question 1

The majority of the candidates created the evidence document successfully.

Data Analysis

Question 2

Most candidates completed this step as required by the question paper although a small number failed to use the naming convention given in the question.

Question 3

The vast majority of candidates inserted a new row in the correct place. A small number of candidates failed to perform this task and some inserted a number of rows rather than a single one.

Question 4

Although most candidates managed to enter the title as specified, there were a number who erroneously had added additional spaces, case errors or had changed 2012-13 to 2012-2013. Few candidates who entered the text set it as a title, for example: by enlarging or enhancing the text.

Question 5

This question was performed well by many candidates. Some candidates did not show evidence of the merged cells in their printouts. The formatting of these merged cells was not performed to the same high standards; there were omissions of the background colour, different coloured text (white instead of black), a significant number of candidates who applied a serif rather than sans-serif font to the cells and many who did not place a thin black border around each of the 4 new cells.

Question 6

This question was poorly answered by a significant number of candidates. The advent of tools such as 'format painter' should have made this a very quick and easy task but few candidates achieved the required consistency of presentation with the merged cells to gain this mark.

Question 7

Whilst most candidates used a function to perform this task, many used it inappropriately with examples like =SUM(B4+B5+B6) which did not make any use of the function selected. It is important that candidates are using the most appropriate available function to solve these problems. Some candidates offered incorrect formulae such as =B4+B5+B6 that did not include the use of a function.

Question 8

This question was performed well by the majority of candidates, although again some candidates ignored the instruction to use a function. Like the responses to **Question 7** a number of functions were not used efficiently or appropriately.

Question 9

This question was performed well by the majority of candidates, although again some candidates ignored the instruction to use a function. Like the responses to **Question 7** a number of functions were not used efficiently or appropriately.

Question 10

This question was not completed as well as in previous years. One solution for candidates was to use copy and paste for this replication rather than the drag and drop replication seen in previous question papers.

Question 11

This question required the use of a simple subtract formula replicated for all months and quarters (the sub-totals). Examiners saw a vast range of different responses, some candidates producing correct responses for the months and other candidates producing them for each quarter – but not both. There were also a significant number of responses with the correct subtraction formulae placed inside an array of different functions, many gave the correct answer but did not show any understanding of the functions used.

Question 12

This question was attempted by most candidates but many candidates opted for a SUM function but included each month and sub-total within the range of cells produced. Correct responses included the range of cells for the months or the 4 sub-totals for each quarter. This function was frequently replicated correctly.

Question 13

A number of candidates placed these elements in the header, although most used the footer as specified in the question. The automated path and file name should not have included duplicates of the file name. If a candidate's software placed the file name in the automated file path, then there was no requirement to add it a second time to the right of the footer.

Question 14

Most candidates who used a function for this question selected the correct MAX function. A significant number of candidates erroneously typed the name of the month with the highest value into this cell. The range of cells selected was frequently incorrect with many candidates including the quarterly sub-totals in the range of cells and therefore skewing the results.

Question 15

Most candidates who used a function for this question selected the correct MIN function. A significant number of candidates erroneously typed the name of the month with the lowest value into this cell. The range of cells selected was frequently incorrect with many candidates including the quarterly sub-totals in the range of cells but in this case it did not skew the results as these could not contain the lowest value.

Question 16

Most candidates who used a function for this question selected the correct AVERAGE function. The range of cells selected was frequently incorrect with many candidates including the quarterly sub-totals in the range of cells and therefore skewing the average calculations. A number of candidates ignored the instruction to use a function and used a formula to manually calculate the average monthly profit.

Question 17

In the rubric setting the scenario (before step 2) candidates were told "Display all currency values in dollars with 2 decimal places." Many followed this instruction but many did not. The cells containing number of trips were frequently formatted as currency values and the instruction to use dollars was frequently ignored with responses seen in a number of currencies local to the centre sitting the paper.

Question 18

This question was poorly completed by many candidates. The question has 2 distinct parts: the first to use a ROUND function and the second to change the display format of the cell. A number of candidates chose INT rather than ROUND and a smaller number used either ROUNDUP or ROUNDDOWN, neither of which were appropriate for this task. Changing the display format to integer values was completed correctly by more candidates, but there were a significant number of candidates who submitted this formatted to 2 decimal places.

Question 19

Most candidates printed the formulae view of the spreadsheet, however some produced printouts with portrait rather than landscape orientation and a large number of candidates did not display the row and column headings on their printouts. There were a significant number of printouts that did not show the contents of all the cells to the Examiners. Please note that work must be readable by the Examiner with the naked eye, so printouts where the formulae and values are so small that they cannot be marked, cannot be awarded any marks.

Question 20

The majority of candidates produced this print out, however there were a significant number of candidates who did not enlarge all the columns so that all of the data and labels were fully visible. The requirement to fit the spreadsheet on a single page should not be solved by reducing the point size to an unreadable size after leaving excessive whitespace in the cells.

Question 21

Most candidates who attempted this question did so successfully.

Question 22

This was completed well by many candidates. As this should have led candidates to repeat the printout settings from **Question 20**, a significant number of the same issues were found replicated in this question.

Question 23

Few candidates attained full marks on this question. A small number of candidates produced horizontal bar charts rather than vertical. Selection of the data for the correct bars appeared to present a problem for some candidates; many included the quarterly sub-totals or final annual total within the selected data. A number of candidates included a legend despite the instruction to not include one. The chart should have been fully labelled but a significant number of candidates did not include all the required elements, frequently chart titles were omitted, as were axis titles. The most common error was the failure to display all the names of each month in full.

Question 24

Most candidates successfully created a pie chart although few selected only the data for each quarter. A significant number of candidates produced a pie chart showing combined data for months and quarters. Few candidates fully labelled the chart which should (for this particular question) include a chart title and values. As different greyscale shades or patterns were required, a legend should have been included. A significant number of candidates used the default colour settings for each segment rather than editing these to produce the required result.

Question 25

Most candidates who attempted the pie chart completed this question correctly although a small number highlighted the segment rather than extracting it. Some candidates erroneously split the pie chart so all segments were extracted.

Website Authoring

Question 26

The majority of the candidates created the new folder successfully.

Question 27

The majority of the candidates completed this question successfully.

Question 28

This was a different style of question to those found in previous sessions and required the candidates to amend a stylesheet containing errors. Most candidates successfully opened the stylesheet and attained some marks but few were careful in their checking of the .css syntax. It was clear that only a few candidates had checked that the styles worked in their webpage.

Question 29

The majority of the candidates saved the stylesheet successfully, although some candidates ignored the instruction to rename the file to include their candidate number. Some candidates did not save the file with the .css file extension.

Question 30

Almost all candidates added this screen shot to their evidence document but in many cases the font size of the styles was so small it was very difficult to read. Where Examiners are unable to read the work submitted they are unable to credit the candidate with any marks. Despite an instruction to: "Make sure that the filename is clearly visible", a number of candidates did not do so.

Question 31

The majority of the candidates completed this step successfully.

Question 32

The majority of the candidates completed this step successfully. A small number of candidates erroneously embedded the css within the head section of the page rather than attaching an external stylesheet.

Question 33

The majority of the candidates completed this step successfully.

Question 34

The table border was set to 2 by most candidates, although a variety of methods was seen for performing this task.

Question 35

Many candidates set the table width attribute to 100%, although a significant number of candidates set this as an absolute value, ranging from 100 pixels to 1920 pixels.

Question 36

The majority of candidates successfully replaced the text with the logo image for the company.

Questions 37 to 39

Each of these questions required the candidates to select the most appropriate images from those downloaded. The majority of candidates completed this correctly. Those who found this more challenging could have used the Internet to discover what a starfish, shark or turtle look like if they did not have that knowledge prior to the examination. A small number of candidates placed the images in the correct cells but did not replace the text as required by the question paper.

Question 40

Although this question was frequently answered correctly, there were a significant number of candidates who omitted this step or included errors in their resize values. One error which occurred fairly frequently was resizing the image height to 200 pixels rather than the width. There were also some candidates who resized the image width and left the original height and therefore changed the aspect ratio, distorting the image.

Question 41

A small number of candidates from a range of centres did not correctly print the browser view as a screenshot. A number of candidates omitted the html printout completely.

Question 42

The majority of candidates completed this step successfully.