

# INFORMATION AND COMMUNICATION TECHNOLOGY

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Paper 0417/11

Written Paper

## Key messages

Questions requiring one word or single sentence answers were done fairly well, while the questions requiring more detailed answers needed to contain more explanation or discussion.

Any question inviting the candidate to discuss advantages or disadvantages requires comparisons to be made.

It is important that candidates spend time reading a question thoroughly so that they are quite sure what is required. This was particularly the case with **Questions 5, 9 and 14**.

Many candidates appeared to have been ill prepared for the examination with many of the updated parts of the syllabus seeming to have been left untouched.

The syllabus has changed markedly from this year onwards and candidates did not seem to have been prepared for this.

## General comments

**Question 6** was answered very well as were the tick box questions. When answering other questions, it may be advisable for candidates to list their thoughts in rough before choosing those that would be appropriate to match the phrasing of the question.

There was still a tendency for some candidates to 'guess' when they did not know the answer and then reproduce answers from past mark schemes completely unrelated to the question. This was particularly the case with **Question 18**. Many candidates did not answer the questions as set but instead reproduced answers which appeared to have been learnt by rote from a previous mark scheme.

In this paper candidates are required to show a level of understanding as well as knowledge. As has been highlighted in previous reports, this cannot be achieved by simply repeating mark points from previous mark schemes.

## Comments on specific questions

### **Question 1**

This was not as well answered as had been expected with many candidates not observing the requirement that a device had to be named. Part **(d)** was better answered but even here the majority of candidates gave incorrect answers. It appeared that the candidates were often just guessing their answers and were unfamiliar with input devices in general and direct data entry in particular.

### **Question 2**

This was generally very well answered with the majority of candidates gaining both marks. The incorrect answers were distributed evenly amongst the first three options with most candidates knowing that spreadsheet applications software.

### Question 3

This was very well answered with many candidates gaining at least two marks. Incorrect answers were evenly distributed among the four options.

### Question 4

This was generally well answered with many candidates gaining at least two marks. Part **(c)** was best answered but part **(d)** was poorly answered.

- (a)** Many correct answers though a number of candidates gave fraud as their answer with a significant number not attempting it.
- (b)** Again, many correct answers though a number of candidates gave hacking as their answer but again a significant number did not attempt.
- (c)** The vast majority of candidates answered this correctly.
- (d)** Very few candidates appeared to have learnt about smishing. Many answered phishing or pharming.

### Question 5

Candidates did not do very well on this question at all. Many seemed to ignore the question completely. Many gave a list of general precautions to keep data safe, totally unrelated to any legislation. Examples of this were backing up data, using a password, installing anti-virus, do not open suspicious emails and other answers in a similar vein.

### Question 6

This question was one of the best answered questions on the paper with virtually all candidates gaining at least three marks.

### Question 7

This question was fairly well answered although part **(b)** produced much better answers than part **(a)**.

- (a)** A number of candidates wrote about industries in general without giving the actual type of job that had been replaced by computers. Some even gave answers completely unrelated to computerisation.
- (b)** Most candidates were able to get one mark usually to do with maintenance of computers. There were many vague answers such as business, office and engineering.

### Question 8

Candidates seemed unprepared for this question with very few appearing to understand the topic of a router storing computer addresses. Those candidates that did gain marks usually only gained it for mentioning IP address. One in six candidates did not attempt this question.

### Question 9

This question was not well answered with most candidates failing to gain more than two marks. Part **(b)** produced slightly better answers than part **(a)** particularly with the more able candidates.

- (a)** Many candidates did not recognise the focus of the question which was to minimise the possibility of passwords being misused if intercepted, so after the event. Because of this they gave suggestions on sensible passwords such as strong passwords using a range of characters and so forth.
- (b)** Generally there were quite a lot of vague responses about being quicker and easier. Many candidates failed to link these to anything specific such as saving time of travelling or money spent on petrol/travelling.

### Question 10

This question was not well answered with many candidates seemingly unaware of this topic, a new addition to the syllabus. Parts **(c)** and **(d)** were particularly poorly answered.

- (a)** Only the most able managed to get the correct answer with several of the weaker candidates just repeating the stem of the question.
- (b)** Again, the stem of the question was repeated with general answers such as details of the car/details of the driver being frequent responses rather than specific items of data. More able candidates did usually get a mark for at least one item of data.
- (c)** This part of the question was not answered at all well. Most candidates gave a very vague description of OCR. Many did not relate it specifically to the scenario. Lots of explanations about documents, including the marking of multiple choice exam papers. Scanners were frequently mentioned, but again vaguely. Some spoke of facial recognition.
- (d)** Again this part of the question was very poorly answered. Candidates had the awareness that the data gathered fed into a personalised message in some way but were hazy on the process and steps involved. Explanations frequently involved the words information and data without specifically saying what these were. A substantial number of candidates did not attempt this part of the question.

### Question 11

This question produced much better responses than many of the other questions with candidates usually gaining at least six of the available marks. Part **(b)** was the only part of the question that appeared to present any difficulties.

- (a)** The majority of candidates gained both marks. Very few had the order incorrect but a sizeable minority gave incorrect fields which were clearly unsorted.
- (b)** Having gained marks for part **(b)** candidates found great difficulty in identifying this field with only the most able tending to gain marks.
- (c)** This part of the question was very well answered with most candidates gaining at least four marks. Surprisingly few candidates confused OR with AND but a sizeable minority confused their less than and greater than symbols.
- (d)** The vast majority of candidates gained both marks.

### Question 12

This question was poorly answered. Many candidates struggled to gain more than one mark which was usually for part **(a)**.

- (a)** Very few candidates focused in on the point of the question which was to examine this form with a view to evaluating how easy it was to enter data. A surprising number focused on data types and other aspects of file structure rather than how easy it would be to enter the data using the examples given in the table.
- (b)** Candidates did not appear to have read the question properly and consequently did not refer to the two example dates provided and concentrated on regional variations of date formats.

### Question 13

This question was reasonably well answered but many candidates failed to gain marks for part **(a)**. Part **(b)** was much better answered.

- (a)** There were many different interpretations of the term URL but unfortunately most were incorrect. A few candidates identified what the initials stood for but none mentioned domains or file paths.

- (b) Most candidates gained at least one mark for this question, usually for correctly identifying the URL but fewer managed to correctly explain the purpose of the URL.

#### Question 14

This question was not answered well. Candidates seemed to have ignored the advice contained within the question about no change of computer or ISP being appropriate. Many responses connected to installing firewalls or updating software. A substantial number of candidates wrote about changing the ISP.

#### Question 15

This was not answered at all well. Rarely was a full definition given. Although some candidates were able to give examples of generic formats these were seldom sufficiently explained. Some related their responses to formatting of documents e.g. changes appearance of text.

#### Question 16

Again, this question was not well answered. Many candidates assumed that if the letter was going to be mail merged rather than photocopied it would go on to be sent by email, despite the question clearly stating that the letter would be printed. Hence lots of responses connected to saving money on printing/posting and quicker receipt as well as benefits to the environment.

#### Question 17

This question was well answered with nearly all candidates gaining the mark for part (b) and tending to gain at least two marks for part (a).

- (a) Generally well answered. A few candidates introduced the notion of 'winning' into their answers so giving titles such as (ii) medal winners of the commonwealth games.
- (b) Very few candidates failed to gain this mark.

#### Question 18

This was not well answered with very few candidates identifying the layers and fewer still describing them. Many candidates wrote about the systems life cycle or stages of it such as of design, develop or test. Some had described different types of web content such as blogs/wiki. Some gave a description of a split screen used when designing a website in some specific software where you can choose to see the code on half the screen and the resulting presentation on the other. Some candidates had related this question to the previous one and gave answers about the bar chart of the Commonwealth Games.

#### Question 19

Many candidates managed to gain some marks for this question though many went off at a tangent. Many candidates gave very vague answers relating to anti virus, encryption and about not trusting emails and their attachments from unknown sources. A number failed to go beyond basic descriptions both of passwords and biometrics. Answers were generally not extensive enough to gain higher marks.

#### Question 20

Most candidates gained marks here. Some failed to gain marks for incomplete descriptions but generally, this part of the syllabus appeared to have been covered well. A number of candidates appeared to have recognised the changes but were unable to identify or describe the formatting technique.

# INFORMATION AND COMMUNICATION TECHNOLOGY

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Paper 0417/12

Written Paper

## Key messages

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

Questions inviting the candidate to discuss advantages or disadvantages require comparisons to be made.

Candidates need to spend time reading a question thoroughly so that they are quite sure what is required.

## General comments

Candidates did not appear as well prepared for this paper as in previous years. The syllabus has been updated and there are a number of changes compared to the previous year's syllabus. Candidates did not seem to have been prepared for this.

One worrying issue was that there were more brand names used in answers than in previous years. It is clearly stated on the front page of the exam paper 'No marks will be awarded for using brand names of software packages or hardware.'

There still appeared to be a degree of rote-learned answers from previous years' mark schemes. Rote-learning mark schemes is strongly advised against as, although questions might cover a similar topic, the questions themselves might change considerably. For example, for **Question 11**, many candidates seemed to have learnt the advantages of the methods of implementation but did not understand what they had learnt so they could not give a situation where a particular method might be appropriate.

In this paper candidates are required to show a level of understanding as well as knowledge. As has been highlighted in previous reports, this cannot be achieved by simply repeating mark points from previous mark schemes.

Candidates must read questions carefully before answering. This was particularly the case with **Question 9** where a number of candidates gave answers from the point of view of the customer rather than the computer and the withdrawal of cash when the question referred to checking a balance.

## Comments on specific questions

### Question 1

The vast majority of candidates gained full marks. Where this was not the case most candidates did not do so well on part (a) and part (d).

- (a) Most candidates gained the mark but where they did not it was down to answers like mousepad and tracker ball.
- (b) The vast majority of candidates gained the mark.
- (c) Virtually all candidates gained the mark.

- (d) The majority of candidates gained the mark but there were a variety of storage or USB devices used to answer the question by some candidates.

### Question 2

This was not as well answered as expected with fewer than half the candidates gaining both marks. The central processing unit caused most difficulty.

### Question 3

This was much better answered with most candidates gaining both marks. Where this was not the case it was because candidates felt the content of the internet is more easily controlled than on an intranet.

### Question 4

Candidates did fairly well overall on this question although they struggled with parts (c) and (d).

- (a) Most candidates gained the mark. There were however, a number of strange answers like smishing, pharming and antivirus.
- (b) The vast majority of candidates gained the mark but again there were strange answers from some candidates such as 'hacking' and 'firewall'.
- (c) Very few candidates gained the mark for this part. Many answers were clearly guesses from candidates trying to give some form of answer. Quantum Cryptography was the commonest error.
- (d) Even fewer candidates gained this mark with many answering simply 'email'.

### Question 5

Candidates did fairly well on this question with the majority gaining at least one mark although few candidates gained more than two marks. Many candidates unfortunately gave answers relating to antivirus, antispyware and firewalls.

### Question 6

This question was reasonably well answered with the majority of candidates, again, gaining at least one mark. Candidates answered part (a) very well although part (b) was answered poorly with part (c) being fairly well answered.

- (a) Candidates did well on this part of the question with the majority of candidates giving the correct answer. A large number of weaker candidates, however, gave answers such as WAN or LAN.
- (b) Both parts (i) and (ii) were answered badly with router being used frequently here.
- (c) Many candidates were able to gain a mark here, mostly relating to data security, but many either did not make comparisons, or failed to clarify that comparison. Many had slower without saying data transfer.

### Question 7

This question was well answered by most candidates.

- (a) About half the candidates were able to name Voice over Internet Protocol, but virtually no candidates earned a second mark, with vague descriptions of the use rather than the meaning of VOIP. Common errors included reference to Video rather than Voice.
- (b) This was well answered in the main but there a number of candidates who did not give items of computer hardware or items that are necessary for VOIP.

### Question 8

Candidates generally did quite well on this question with most candidates gained at least one mark. Many got the point about becoming lazy but struggled with the other point.

### Question 9

Overall this question was not answered well, although answers to part **(a)** were slightly better than part **(b)**.

- (a)** Most of the more able candidates answered this quite well but some of the weaker candidates struggled. Many marks were lost by candidates who correctly identified various stages in the process but did not fully itemise them in terms of computer processing performed by the ATM preferring instead to concentrate on the actions of the customer. Despite the wording of the stem of the question many candidates referred to the withdrawal of cash.
- (b)** This part of the question was answered poorly by the majority of candidates. Some candidates repeated points that were acceptable for part **(a)**. Others gave vague descriptions of batch processing of cheques, or other types of transaction and several continued to write about cash withdrawals.

### Question 10

This question as a whole was not as well answered as expected.

- (a) (i)** Candidates appeared to give little thought to their answers for this part of the question, with suggestions that could not possibly be known when the cheque book is produced such as value of transaction and date. A lot of candidates used card details rather than cheque details.
- (ii)** Very few candidates appeared to know this process with some very vague answers. There appeared to be little understanding of the technical side of MICR.
- (b)** The more able candidates usually gained one mark. Security and writing on the bar code were the popular answers. Damaged but still being able to read it and more secure were the two most popular responses but only one was usually given so very rarely were both marks awarded.

### Question 11

This question was well answered with most candidates gaining at least five marks. Most candidates were able to name three methods correctly although a few had strange names. The description was on the whole well done with candidates only really struggling with pilot and direct. The issue was the third part with many candidates unable to think of situations. Many just gave advantages or disadvantages.

### Question 12

Candidates did very well on this question and part **(a)** in particular.

- (a)** Most candidates gained at least four marks. Some candidates were unsure and tended to fill the table with data, some gave validation checks but on the whole it was well answered. Unfortunately, some candidates did not read the question thoroughly and consequently failed to say what type of number Height was.
- (b)** Again, candidates did quite well with most getting two or more marks. Some put candidateID but generally the two correct fields were identified even if the shortened forms were sometimes unclear.
- (c)** This part was again well answered with the majority of candidates gaining both marks. Where candidates lost marks it was generally because of giving the wrong order.

### Question 13

This question was not very well answered. Many candidates did not attempt it, but of those that did many seemed unfamiliar with the topic. A reasonable number of candidates correctly identified File Transfer Protocol, but none were able to correctly describe its nature, and only a tiny minority of candidates were able to describe the role of HTTP.

### Question 14

This question was well answered. Most candidates did better on parts (b) and (c) than part (a).

- (a) Many candidates made good attempts at this question, where candidates lost marks it was generally for failing to include 'corresponding' when referring to the sum range.
- (b) This part was well answered. Where candidates failed to gain full marks it tended to be for giving H8 and I8 presumably just to match B8.
- (c) This part was again well answered by most candidates, but too many gave the wrong function – mistakes such as SUM, SUMIF and COUNTIF were common. Some candidates invented their own functions!

### Question 15

Candidates did not do as well as expected on this question. Most candidates gained one or two marks with only the most able giving answers in sufficient detail to merit more. Many candidates concentrated on virus and security risks rather than web site information. Some combined good answers with some worrying misconceptions. Many thought that the first answer shown is likely to guarantee reliability, as is a site's popularity. Some found it difficult to separate this from **Question 5**, and so gave answers relating to the use of software solutions to guarantee reliability and that a popular search engine would also help. A significant number confused reliability with security and talked about the need to look for padlocks.

### Question 16

This question was not as well answered as expected with only the most able candidates gaining many marks and the majority gaining one or fewer marks.

- (a) Many candidates managed to get one mark for referring to text but did not expand on this.
- (b) Few candidates knew what gif stood for and often referred to images or animation but very rarely both.
- (c) This was surprisingly poorly answered, with very few knowing what the letters stand for. Many candidates failed to get even one mark.

### Question 17

This question was quite well answered with many candidates correctly identifying at least two mistakes and their corrections. Many candidates made a creditable effort for this question, but many lost marks by stating that the **URL** for the background image was wrong, by stating the letters in hex numbers should be given in capitals, or by not making both the mistake and the correction clear. A surprising number thought that 'color' was wrong and should be 'colour'.

### Question 18

As intended, this question proved to be a good discriminator with marks being distributed across the ability range. The most able candidates were allowed to demonstrate their ability on a testing question. Many weaker candidates tended to concentrate on the input devices without identifying user interfaces. Others mentioned CLI and GUI but no input devices.



# INFORMATION AND COMMUNICATION TECHNOLOGY

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Paper 0417/13

Written Paper

## Key messages

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

Questions inviting the candidate to discuss advantages or disadvantages require comparisons to be made.

Candidates need to spend time reading a question thoroughly so that they are quite sure what is required.

A disappointing feature of this session's assessment was the number of candidates who left answer spaces blank without making any attempt to answer the question.

## General comments

It did not seem as though the majority of candidates were as well prepared for this paper, particularly in the light of the many changes and updates to the syllabus. Many candidates did not score well on a number of questions.

There were a number of areas of the syllabus that seemed to show a lack of understanding. Examples were computers in libraries, the processing of OMR media, ISPs, the effects microprocessors have on aspects of lifestyle, the reliability of information found on the Internet and generic file formats.

Some questions which required choosing between two options such as **Questions 2** and **3** were answered very well as were **Questions 1** and **4** on the whole.

Candidates must read questions carefully before answering. This was particularly the case with **Questions 5, 15** and **16**.

## Comments on specific questions

### **Question 1**

The vast majority of candidates gave at least three correct answers. Where marks were dropped it was usually on part **(c)**. Incorrect answers for part **(c)** were answers like thermometer or heat sensor.

### **Question 2**

The vast majority of candidates gained both marks. The tiny minority that did not, usually had the ticks completely the wrong way round.

### **Question 3**

Candidates did quite well on this question with many gaining both marks. Where candidates seemed confused was regarding the options regarding WLAN and the internet.

#### Question 4

This was answered very well with candidates usually gaining the mark for parts **(a)**, **(b)** and **(c)** though few got the correct answer for part **(d)**. A surprising number did not attempt parts **(a)**, **(b)** and **(c)** but a sizeable number omitted part **(d)**.

- (a)** The large majority of candidates gained this mark but a number repeated the question with answers like 'in range' or 'validation'.
- (b)** Again a lot of candidates gained the mark but a variety of wrong answers were provided by a minority of candidates usually saying 'range check' or 'range value' or even 'extreme'.
- (c)** Where incorrect answers were given, which were in the minority, some strange answers like 'limited' or 'length check' or abnormal.
- (d)** Very many candidates did not attempt this part of the question. Most did not know the answer. Some guessed and gave answers like 'database' or just repeated some of their answers from part **(a)** or **(b)** or **(c)**.

#### Question 5

This was answered quite well with many candidates getting at least three marks. The majority of wrong answers to this question saw candidates give the answer as if they were evaluating the use of online booking systems rather than identifying uses for it.

#### Question 6

This question was not particularly well answered although many candidates managed to gain at least one mark. Candidates appeared not to have read the question fully and gave the advantages and disadvantages of using microprocessor controlled devices or described how to use them without mentioning lifestyle changes.

#### Question 7

This was on the whole reasonably well answered although part **(d)** was not particularly well answered. Parts **(c)** and **(e)** were well answered with **(a)** and **(b)** not quite as well answered.

- (a)** Candidates did well on this question with many candidates giving a correct answer. The most commonly occurring incorrect responses consisted of very vague or incomplete answers like 'the first person you want to send it to'. A surprisingly large number did not attempt this question.
- (b)** Candidates did not do as well on this question but a reasonable number gave a correct answer. The most commonly occurring incorrect responses consisted of very vague or incomplete answers like 'the second person you want to send it to'. This question had the greatest number of candidates not attempting it.
- (c)** The majority of candidates gave a correct answer. Of those that did not, many just mentioned it was the sending of an email.
- (d)** This part of the question proved very difficult for most candidates. Most just reworded a combination of the stem and the question and answered it was to send an email to a group.
- (e)** The vast majority of candidates gained this mark.

#### Question 8

Overall this question was not well answered with candidates doing slightly better on part **(b)** than part **(a)**. Very few candidates referred to the book or borrower file.

- (a)** Many candidates repeated the question and described the system of borrowing a book in general terms rather than describing the computer processing involved. Only the most able gained more than one mark

- (b) This was slightly better answered but only in the sense that candidates did, on occasion, allude to the need for the book record to be flagged as returned.

### Question 9

This question was reasonably well answered by candidates; with the vast majority getting at least two marks. Part (b) was slightly better answered than part (a).

- (a) Most candidates managed at least one mark but it was surprising the number of candidates who thought you would type in your full password.
- (b) Many candidates gained at least one mark with the most able scoring two or, at times, three marks. Again it was surprising the number of misconceptions some candidates had. Many thought you would do your online shopping by phone banking. Many gave the advantages and disadvantages rather than the actual uses. Many thought you could pay in and withdraw cash over the phone.

### Question 10

This question was not well answered although candidates did quite well on part (a) but not on (b) or (c).

- (a) Most candidates managed at least one mark but it was surprising the number of candidates who did not attempt it. Answers sometimes included 'OMR' or even devices like Optical Mark Reader and Bar code reader.
- (b) Many candidates seemed to lack understanding of this topic. This part was not answered well with very few candidates managing even one mark. Answers were frequently in the vein of 'scanner reads the marks and adds up the score'.
- (c) Only the more able managed to get even one mark. Many candidates gave vague answers about cost/expense; cleanliness; general use of the equipment as being drawbacks of such a system.

### Question 11

This question was quite well answered by most candidates, although part (a) was not as well answered as the other parts

- (a) Very few candidates realised that a check digit was required and a variety of alternative checks that would not have trapped the error.
- (b) This question was quite well answered. Most candidates were able to name the check correctly and many went on to get at least one mark for a correct description.
- (c) Many candidates managed to explain their reasoning quite well but far fewer were able to correctly name the check.
- (d) The majority of candidates gained at least 4 marks for this question. Common errors were with the Price and Weight fields. A number of candidates ignored the stem of the question and gave numeric as the field type without expansion.

### Question 12

This question was answered reasonably well although part (b) was much better answered than (a).

- (a) Most candidates gained at least two marks and those who correctly identified that the formula was a 'Countif' gained more than half marks. However, it appears that candidates do not fully understand the implication of the formula having to be replicated and failed to use absolute cell referencing.
- (b) This was very well answered with the majority of candidates naming A24 and B24 but often forgetting D15.

### Question 13

This was not particularly well answered with many candidates struggling to correctly identify what ISP stands for or does. Many interesting attempts such as 'Internet Security Protocol', 'Internet Service Protocol' and 'International Security Pass' were offered. Even those who correctly gave 'Internet Service Provider' were unable to describe the services it provides. Many candidates did not attempt this question.

### Question 14

This question, surprisingly, was not well answered. Most candidates made fewer than two valid points. Many candidates concentrated on describing the safety issues of the internet rather than evaluating the reliability of the information therein. Where marks were gained it was usually by comparing the information found with other sites and being wary of using information from sites which can be edited by other users.

### Question 15

This question was not answered well. Most candidates seemed unable to describe these file formats or give a use.

- (a) Candidates who gained a mark, and there were few, usually did so for mentioning photographs. Many just gave a one word answer such as image or picture.
- (b) Candidates failed to describe this in any detail referring to it being an image, a video, a file and a moving image.

### Question 16

Candidates did quite well on this question usually identifying at least one change. Unfortunately, the question required the candidate to describe the changes in detail but often there were vague answers like it's been rotated or flipped or it has changed colour.

### Question 17

Candidates did fairly well on this question with most getting at least three of the changes. Many failed to identify the . instead of : after mailto and the , instead of ? in front of subject.

### Question 18

Most candidates identified at least two improvements. There were a number of spurious suggestions such as making the font size bigger or making the background more colourful. In addition, there were incomplete or vague suggestions such as 'change the font/font size' without saying what to. A number of candidates ignored the question requiring it to be more appealing to an adult audience and targeted School children instead.

### Question 19

Many candidates gave answers which put them firmly in the L1 band or the L0 band. Many failed to meet the criteria by only stating what spreadsheets or databases might be used for without giving any advantages or disadvantages. Most candidates only achieved Level 1 marks due to candidates failing to address both aspects and giving simplistic answers with little relevance to the question.

# INFORMATION AND COMMUNICATION TECHNOLOGY

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**Paper 0417/21**  
**Practical Test A**

## Key messages

The revised 0417 syllabus now incorporates the assessment objectives recall, select and communicate knowledge and understanding of ICT (AO1) and analyse, evaluate, make reasoned judgements and present conclusions (AO3) within the practical papers. 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.

The paper gave a good spread of marks. Overall fewer candidates achieved excellent results compared to papers in the previous version of this syllabus and this was mainly due to the inclusion of theory and evaluation questions within the practical papers. Most candidates attempted the knowledge questions but the evaluation questions were not completed well with many candidates providing descriptive responses rather than evaluating the data entry form they had created and the features of the presentation that meet the needs of the audience.

There were a significant number of typographical errors in data entry throughout the paper. Many of these inaccuracies could have been avoided with more careful checking and proof reading. Candidates are advised to enter the text exactly as shown on the exam paper and to check and recheck this data entry in the document, report, mail merge and presentation. Common errors included incorrect capitalisation, incorrect or missing characters, omission of spaces, truncated headings and additional punctuation. Candidates also have difficulty distinguishing between the typeface categories serif and sans-serif with some using these as a font face name. This was evident in the screenshot evidence of the paragraph style where some candidates entered 'Serif' or 'Sans-serif' as the font name in the font dialogue box rather than selecting a font style with the serif or sans-serif properties required.

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. Printouts will not be marked if the names and details are missing, or if these 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 marked without identification details on the second page providing the layout is consistent and it is obviously part of the same document. It is therefore important that exam Supervisors return all printouts to candidates, even where identification details are missing from the second page as Examiners can identify that it is part of the same document. 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 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 candidates the marks. Similarly, some candidates did not achieve marks as a result of presenting screenshots with important elements cropped. Candidates should be encouraged to print their Evidence Document towards the end of the exam, regardless of whether they have finished the exam paper. Centres **should not** staple the work, hole-punch or tie it together with string. A number of candidates lost marks where holes had been punched through text being marked such as the headings of database reports.

## **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**

The page setup was generally completed well. A few candidates set the margin measurements in inches rather than centimetres without converting the measurements. Some candidates displayed a screenshot of the actual document without the page setup options visible and a few incorrectly evidenced the printer orientation settings rather than the document page setup options. The paper orientation evidence was occasionally cropped out of the screenshot image.

#### **Question 2**

Most managed to save the file but some failed to follow the capitalisation as shown or introduced data entry errors into the file name. A large number of candidates saved in the original rtf format rather than in the format of the word processing software being used. 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. In these instances if the file extension was not evident in the footer there was insufficient evidence that the file had been saved in the correct format.

#### **Question 3**

This was mostly well done. Occasionally the header items did not align with the page margins and some candidates left superfluous text or placeholders in the header and/or footer area. A number of candidates did not centre the footer or include the file path.

#### **Question 4**

This question tested new skills with the creation and application of paragraph styles within the document. Few candidates achieved full marks. A number of candidates attempted to apply the formatting attributes to the text in the document without creating the individual styles outlined in the House Style specification. The creation of styles was assessed through the screenshot evidence of the News-subheading style evidence only. The style name occasionally contained capitalisation or data entry errors. The created style was sometimes based on another style which inherited additional formatting from the original style. A style with additional formatting not as detailed in the House style specification was penalised. A few candidates captured evidence of the paragraph formatting dialogue boxes open but did not then show evidence of the attribute saved as part of the style. This was particularly evident in setting the spacing after the style where the paragraph dialogue box was shown open but 12 point spacing after was not saved as part of the style definition. All other styles listed were marked on the appearance of the text to which they were applied.

#### **Question 5 to 8**

Most candidates entered the title and subtitle although these occasionally contained capitalisation and/or spelling errors. Serif and sans-serif font styles were not always applied correctly. The House style specification stated the formatting to be applied to the title and subtitle styles and candidates were penalised if additional enhancements were applied such as the bold enhancement of the title extended to the subtitle, spacing inserted after each style and, quite commonly, an unrequested line below the title style.

#### **Question 9**

There were some inconsistencies in the body text style within the document. Often a sans-serif font had been used or the body font style changed between serif and sans-serif, full justification was not applied to all the body text and some candidates displayed two text sizes for the body text. This suggests that either the News-body paragraph style had not been created or that it had not been applied consistently to all the required text.

### Question 10

Most candidates changed the page layout to two columns but the section break was often in the wrong position. A number of candidates displayed all the document in two columns. Column spacing was generally done well.

### Question 11

Candidates were required to create and apply the News-subheading style. Some candidates created the style incorrectly, but then applied this style correctly to all seven subheadings. If the style of all subheadings matched the News-subheading style definition evidenced in the Evidence Document this style application mark was awarded.

### Question 12 to 15

A small number of candidates failed to insert the table in the correct place or within the column width. The majority deleted the *Rating* column, although a few removed the data but left an empty column in place. The formatting of column 1 required rows 1 to 7 to be merged, light grey shading applied, text rotated and wrapped over two lines, the table style applied and the data centred both horizontally and vertically within the cell. Few candidates formatted the table so it looked exactly the same as shown on the exam paper.

### Question 16 to 18

Most candidates inserted the image in the correct position although aligning and resizing the image was not always accurate and often resulted in the image being distorted. Most reflected the image so it looked the same as shown on the exam paper.

### Question 19

In most cases the numbers were changed to bullets, but not all applied square bullets. Few candidates indented the bullets accurately at 2.5 centimetres from the left margin. The most common fault was additional spacing applied between each line of bullet text.

### Task 3 – Database

#### Question 20

Almost all candidates used the correct field names and data types although a few incorrectly included an ID field. Most set *Course\_Code* as the primary key and displayed the *Course\_Cost* with a currency symbol to two decimal places. The *Residential* field was set as Boolean although often this was displayed on the report with check boxes or True/False instead of Yes/No.

#### Question 21

The design and creation of a data entry form is new to this revised syllabus and this form also required the creation of a drop down menu to limit entries in the *Location* field. This was not completed particularly well. Some candidates used a Wizard to create the form or accepted the default settings provided by the software which resulted in a form where the fields were too large for the data types, there was inconsistent white spacing and ragged alignment. Few managed to create a drop down menu using the *Location* field or to limit data entry to only the five items listed. Some inserted an additional field for the drop down list where the data entered was not stored in the *Location* field. Very few produced evidence that entries were limited to the given list of locations. Some candidates used radio buttons or validation rules to limit data entry and, although not the specific tool requested, some credit was given. Candidates who evidence the automatic filtering facility available within a table or query achieved no marks.

#### Question 22

Most candidates used their data entry form to enter the new record and provided screenshot evidence of this. No credit was given for entering the new record in the database table instead of a form.

### Question 23

Few candidates performed well in this task. Candidates were required to evaluate the data entry form created in **Question 21** so those who did not create a form, or used the database table to enter the new record, were unable to answer this question. To evaluate the form it was necessary to look for the positives and negatives in the form created and the overall effectiveness of the form giving reasoned judgements. Of those who answered this question the majority provided descriptions of their form, a general overview of what makes a good or bad form or just gave a list of the fields used in the form without relating it to their own form.

### Question 24

Most candidates imported the second table without any difficulty, set the primary key and successfully linked the Rating fields. The one-to-many relationship between the two tables was almost always accomplished without error.

### Question 25

Most candidates made a good attempt at this first report which drew fields from both tables. A new calculated field was created with a simple calculation which was generally successfully achieved. The new field heading *Daily\_Cost* occasionally contained capitalisation or data entry errors. The search used four criterion. Common errors in the searching included only finding records of less than 12 days Duration rather than equal to or less than 12, and including activities only in Scotland rather than excluding these. Most displayed the correct fields but these were often not fully visible and in the wrong order with the software defaulting to place the sort fields first in the report. The sorting on two fields was frequently incorrect with only the Activity field sorted. The report title frequently contained errors particularly in the text Residential and Activities. The data usually fitted to one page wide with landscape orientation. The count calculation was done well but this was often not positioned under the *Course\_Code* column. The label *Total water codes* contained capitalisation errors and was usually positioned to the left rather than the right of the calculation. Several did not provide screenshot evidence of the formula used to count the records.

### Question 26

Candidates were required to produce a database extract for inclusion in the newsletter. Most candidates displayed the correct fields in the required order. The most common errors were using 'begins with' instead of 'contains' to select the required activities, the inclusion of the records for Scotland as well as France and the *Course\_Cost* field not displayed with a currency symbol to two decimal places. A significant number of candidates sorted the records in ascending rather than descending order of *Course\_Cost*.

### Task 4 – Document 2

#### Question 27

Most imported the database extract although a small number of candidates inserted it in the wrong place or not within the column width. In a few cases the extract was printed as a separate document. Candidates were required to manipulate the data so it displayed on one line but many failed to do this and accepted the default presentation. Several did not apply the News-table style to this extract.

#### Question 28

The document layout and presentation should be checked to ensure that spacing is consistent, there are no split tables or lists, no widows or orphans, no blank pages and the paragraph styles have been applied. Inconsistent spacing was common due to additional hard returns entered within the document, as was areas of white space and unequal column alignment at the top of the page.

### Task 5 – Mail Merge

#### Question 29

This a new skill tested in the revised syllabus and on the whole candidates performed extremely well in this task. The majority displayed the date in the correct format although some used the format 12/04/2016 and a few included the day. Very few provided valid evidence of a date field in the format dd MMMM yyyy with most providing a screenshot of the master letter or date but not a date field. To achieve this the date should be



inserted as a field and the field codes displayed to capture this evidence. The mail merge fields were inserted in the correct order but some candidates did not replace the existing text and chevrons and the most common error was failure to retain the space between fields. The majority of candidates corrected the two spelling errors. Most 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.

### **Question 30 and 31**

This was done well by many candidates with most providing evidence of an automated selection for the Ski Instructor records. Despite this, there were a significant number of candidates who failed to produce any letters or merged to all the records instead of the required selection. Some of the resulting merged letters did not resemble the main master letter with inconsistencies in the layout and presentation. A few candidates attempted to use 'find' or 'find in field' to select recipients at the printing stage which did not merge the letters and some candidates printed multiple copies of the original master letter containing merge fields.

### **Task 6 – Presentation**

#### **Question 32**

This task was carried out successfully by candidates most of whom imported the five slides without difficulty.

#### **Question 33**

Candidates were required to produce a master slide and, as a minimum, incorporate the master items listed. All master slide items must be positioned and formatted consistently but candidates had the freedom to design the presentation to meet the needs of the target audience which was to be used in face-to-face staff training. Some items were positioned inconsistently across the slides suggesting a master slide had not been used. Marks were lost for one or more elements not being in the same position on all slides. Candidates who used a variety of additional features were better able to evaluate their presentation in **Question 36**.

#### **Question 34 and 35**

The content of the slides 4 and 5 formed the theory questions to test Assessment Objective 1. Candidates were required to identify ways of recognising spam email and then identify two methods to protect against spam. Access to the internet during the examination is not permitted so no marks could be gained from answers copied from websites. Very few candidates gave clear statements about how to recognise or prevent spam, with some restating the text that was already given in slides 2 and 3. Many wrote about computer security and security of personal data in general.

#### **Question 36**

This was not answered well with most candidates giving general descriptions of their presentation and its content, or a general idea of what makes a good or bad presentation. Very few related this to the presentation they had produced or to the target audience in face-to-face staff training.

#### **Question 37**

A few candidates printed individual slides but the majority printed with 2 slides per page.

### **Task 7 – Printing 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

The revised 0417 syllabus now incorporates knowledge and understanding of ICT (AO1) and analysis and evaluation (AO3) within the practical papers. Candidates are no longer allowed access to the internet or email during the examination and this could result in candidates being disqualified from the whole of the 0417 qualification. A small number of candidates appeared to have accessed the internet during the examination and copied information directly from webpage which is a breach of the regulations for this syllabus.

The paper gave a good spread of marks. Overall fewer candidates achieved excellent results compared to papers in the previous version of the syllabus and this was mainly due to the inclusion of theory and evaluation questions within the practical papers. Most candidates attempted the knowledge questions but the evaluation questions were not well answered. Candidates do not appear to understand the difference between describe and evaluate questions with many providing descriptive responses or a list of facts rather than an evaluation considering the advantages and disadvantages with a reasoned conclusion or a judgement of the overall effectiveness.

There continue to be a significant number of typographical errors in data entry throughout the paper. Many of these inaccuracies could be avoided with more careful checking and proof reading. Candidates are advised to enter the text exactly as shown on the exam paper and to check and recheck their data entry. Common errors included incorrect capitalisation, incorrect or missing characters, the omission of spaces and truncated headings. Some candidates lost marks where holes had been punched through text to be marked as the accuracy of the data entry could not be assessed.

Candidates still have difficulty distinguishing between the typeface categories serif and sans-serif. Some paragraph style screenshot evidence showed they had typed 'serif' or 'sans-serif' as the font name in the font dialogue box. Candidates would do well to learn that these are categories of font style with specific attributes and not the actual name of a font.

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. 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. These screenshots must be legible and 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 marks. Similarly, some candidates did not achieve marks as a result of presenting screenshots with important elements cropped. Centres **should not** staple the work, hole-punch or tie it together with string.

## **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**

The page setup was generally completed well. A few candidates set the margin measurements in inches rather than centimetres without converting the measurements. Some candidates displayed a screenshot of the actual document without the page setup options visible and a few incorrectly evidenced the printer orientation settings rather than the document page setup options. The paper orientation evidence was occasionally cropped out of the screenshot image.

#### **Question 2**

Most managed to save the file but some failed to follow the capitalisation or the file name contained errors. A large number of candidates saved in the original rtf format rather than in the format of the word processing software being used. 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. In these instances if the file extension was not evident in the header there was insufficient evidence that the file had been saved in the correct format.

#### **Question 3**

This was mostly well done. Occasionally the header and footer items did not align with the page margins and some candidates left superfluous text or placeholders in the header and/or footer area.

#### **Question 4**

This question tested new skills with the creation and application of paragraph styles within the document. Few candidates achieved full marks. A number of candidates attempted to apply the formatting attributes to the text in the document without creating the styles outlined in the House Style specification. The creation of styles was assessed through the screenshot evidence of the TYB-Subheading style evidence only. The style name occasionally contained capitalisation or data entry errors. 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. A few candidates captured evidence of the paragraph formatting dialogue boxes open but did not then show evidence of the attribute saved as part of the style. Several candidates were unable to apply the 'all capitals' attribute and save this as part of the subheading style. They proceeded to evidence the application of capitals through separate screen captures of each heading. All other styles listed were marked on the appearance of the text to which they were applied.

#### **Question 5 to 8**

Most candidates entered the title and subtitle although these occasionally contained capitalisation and/or spelling errors. The typeface categories serif and sans-serif were not always applied correctly. The House style specification stated the formatting to be applied to the title and subtitle styles and candidates were penalised if additional enhancements were applied such as the bold and italic enhancement of the title extended to the subtitle. Commonly spacing was inserted after both the title and subtitle and occasionally an unrequested line inserted below the style which did not meet with the House style specification.

#### **Question 9**

Some inconsistencies were found in the body text style within the document. Often a sans-serif font had been used instead of serif or the body font style changed between serif and sans-serif, full justification was not applied to all the body text and some candidates displayed two text sizes for the body text. This suggests that either the TYB-Body paragraph style had not been created or that it had not been applied consistently to all the required text.

#### **Question 10**

Most candidates changed the page layout to two columns but the section break was often in the wrong position and a number of candidates displayed all the document in two columns. Column spacing was generally done well.

#### **Question 11**

Candidates were required to create and apply the TYB-Subheading style. Some candidates created the style incorrectly, but then applied this style correctly to all six subheadings. If the style of all subheadings matched the TYB-Subheading style evidenced in the Evidence Document this style application mark was awarded.

#### **Question 12**

The majority of candidates created a bar chart but many included data for 2012 within the selection.

#### **Question 13**

A chart title was inserted but this often contained capitalisation or data entry errors. Most displayed a legend but very few included appropriate axes titles.

#### **Question 14**

Most placed the chart in the correct position with data fully visible.

#### **Question 15**

Candidates were required to explain their chart choice and make a comparison with at least one other chart time. This was poorly done. Most candidates attempted to re-word the question, provided a general description of their chart and/or described how they had created the chart. Some attempted to compare their chart with an alternative but were unable to explain why their chosen chart was more effective at displaying the data.

#### **Question 16**

Most candidates attempted to insert the table in the correct position however this was often incomplete with the first row of the table not imported.

#### **Question 17**

Most inserted a new row into the table and entered the required information accurately.

#### **Question 18**

The table was accurately sorted by most candidates. A few lost the data integrity by sorting on one column only and a few sorted in ascending rather than descending order.

#### **Question 19**

Most formatted the first row as instructed. The first row was merged and the heading centred over the three columns. Bold and italic enhancements were applied with a shaded background. A few candidates applied shading to other rows in the table or applied an inbuilt table design. Some candidates had not imported the first row of the table but achieved the formatting marks if the correct formatting was applied to their first row.

#### **Question 20**

The table style outlined in the House style specification should be applied to rows 2 to 12 of the table. There were a number of inconsistencies in the application of this table style which suggests that a table style definition was not created. The data in columns 2 and 3 was rarely left aligned and very few candidates adjusted the column widths to display the data on one line.

### Question 21 to 23

Most candidates inserted the image in the correct position and aligning and resizing the image was generally well done. The image reflection so the yacht pointed to the left was not always done correctly.

### Question 24

The overall layout and presentation of the document should be checked to ensure that spacing is consistent, there are no split tables or charts, no widows or orphans, no blank pages and the paragraph styles have been applied. Inconsistent spacing was common due to additional hard returns entered within the document, as was areas of white space and unequal column alignment at the top of the page.

### Task 3 – Database

#### Question 25

Most candidates used the correct field names and data types and provided screenshot evidence of the file structure. Most set the Yacht\_ID field as the primary key although a few incorrectly included an ID field. The Price field displayed a currency symbol but not many candidates displayed this to 0 decimal places. The Length field was set as a numeric field but few displayed this to 1 decimal place with some displaying this in integer.

#### Question 26

The design and creation of a data entry form is a new practical skills tested in the revised syllabus although the theory of form design has been covered previously. This task required candidates to create a simple data input form and use this to enter a new record into the yachts database. While many candidates did produce a form, a significant number did not and simply presented a view of the table.

#### Question 27

Most candidates used their data entry form to enter the new record and provided screenshot evidence of this. No credit was given for entering the new record in the database table instead of a form.

#### Question 28

Candidates were required to evaluate the design of their data entry form. Those who did not create a form, or used the database table to enter the new record, were unable to answer this question. Few candidates performed well in this task with the majority describing their form or providing a general overview of what makes a good or bad form without giving an evaluation of the form they had produced.

#### Question 29

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

#### Question 30

The first report was a simple selection on two criteria requiring the use of operators. It used fields from both tables so required the relationship to have been set up correctly. A new field heading was inserted and a calculated field created with a simple calculation which was generally successfully achieved. The new field heading Total\_Berths occasionally contained capitalisation or data entry errors. 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. Sorting on two fields was frequently incorrect with only the Length field sorted. The data usually fitted to one page wide with landscape orientation. The report title was often truncated and contained errors, particularly in the word Yachts. The average calculation on the Length column was not always done correctly with some using count or sum instead. This figure was not always displayed under the Length column or to 1 decimal place. The calculation label was positioned correctly but commonly contained capitalisation errors or additional punctuation. Screenshot evidence of the formula used to average the length was not provided or was incorrect. Those candidates who set the *Length* field to integer in the structure found additional records which matched 40 which were not penalised in the report.

### Question 31

The second report used fields from both tables and a search using two criteria requiring the use of operators and a wildcard. The correct fields were displayed but were often in the wrong order. Sorting on one field was generally done well although this field often appeared first in the report. The selection result was often wrong and included records in Australia which did not contain Yacht in the Builder\_Name. The report title occasionally contained capitalisation or data entry errors. Most presented the report in portrait orientation and fitted it on a single page. Some manipulation was required to ensure all the data displayed in full and not all candidates achieved this.

### Task 4 – Mail Merge

#### Question 32

Mail merge is a new skill tested in the revised syllabus. Candidates generally performed well in this task. It was evident that some candidates had keyed in the date rather than using a date field and this was often keyed in a shortened style or displayed as 26/04/2016 rather than in the format dd MMMM yyyy. Very few provided valid evidence in the Evidence Document of a date field used. To achieve this the date should be inserted as a field and the field codes displayed to capture this evidence. The mail merge fields were inserted in the correct order but some candidates did not replace the existing field text and chevrons. The most common error was failure to retain the spacing between fields. Some candidates did not replace the office field in the body of the letter. 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.

#### Question 33

The content of the letter formed the basis for the theory questions to test Assessment Objective 1. Candidates were required to give an example of a strong password and then identify three features which made this a strong password. The features had to relate to the password they had provided so those who did not give an example of a strong password were unable to answer this question. Access to the internet during the examination is not permitted so no marks could be gained for answers copied from websites. Most candidates provided an example of a strong password and were able to identify one to two features which made this strong. Explanations of the features were often too vague such as 'long' or 'special numbers', and some gave features which they had not used in their password example. Candidates were required to print a copy of the master letter with the merge fields displayed which a number of candidates failed to do. Where this printout was missing some credit could be given from the screenshot evidence of the date field in the Evidence Document if this showed enough of the merge fields.

#### Question 34 and 35

There was a mixed response to selecting and printing only the required records. Some candidates had not inserted this selection field in the body of the letter but still managed to extract the correct records without showing evidence of the selection. A few candidates failed to produce any letters, some merged to all the records instead of the required selection and some produced only two letters instead of three. A few candidates attempted to use 'find' or 'find in field' to select recipients at the printing stage which did not merge the letters. Some provided no evidence of the selection method. In some cases the resulting merged letters did not resemble the main master letter with inconsistencies in the layout and presentation. Once the merge had been carried out some candidates identified that there was no space between the merge field items and corrected this on each individual letter but did not go back and change the spacing between fields on the master letter.

### Task 5 – Presentation

#### Question 36

Candidates performed well in this task with many achieving full marks for this section. Candidates imported the six slides without difficulty.

### **Question 37**

Candidates could design their own presentation but it must use a master slide with a consistent layout and formatting and as a minimum include the master items listed. Marks were lost for one or more elements not being in the same position on all slides. Some items were positioned inconsistently across the slides suggesting a master slide had not been used. Occasionally one or more of the master items overlapped the slide text and this was usually the logo overlapping the bulleted text.

### **Question 38**

Candidates were required to set animation on the bullets so they appeared one by one and provide screenshot evidence of this. Some candidates did not show sufficient evidence of animations on the bullet points. A screenshot of animations applied to bullets on the master slide provided sufficient evidence, or a screenshot showing at least 3 slides as thumbnails with the icon indicating animations set plus one set of bullets with animations applied to each bullet listed.

### **Question 39**

Setting up a looped on-screen carousel is a new skill tested in the revised syllabus. This was done well and most candidates were able to evidence this through a screenshot of the slide setup.

### **Question 40**

The presentation contained two spelling errors which some candidates identified and corrected. Several did not appear to run the spellchecker and therefore did not correct these errors. A few candidates printed individual slides but the majority printed with 6 slides to the page. Some candidates provided screenshot evidence of the presentation in the Evidence Document but provided no individual printout for the presentation. It is not possible to assess or award master slide items from miniature screenshot evidence only.

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

### **Question 41**

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

## 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. For a significant number of candidates, the html section in website authoring questions on the paper was their strongest element, although many found the cascading stylesheet questions more challenging. Many candidates appeared well prepared for this examination and the vast majority who submitted their work showed sound knowledge, skills and understanding. Most candidates completed 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 a factor in the reduction in the number of candidates achieving well on the stylesheet question.

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.

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, hole-punch or tie it together with string. A number of candidates lost marks due to the holes taking 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. It is essential that **ALL** candidates adhere to these instructions.

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

Candidate responses this year included screen shots to show evidence of the work. A majority of candidates produced screen shots so small that examiners had to use magnifying devices to try and award candidates' marks. Candidates should check each printout to ensure it is large enough to be read, 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 screenshots with important elements cropped.

## Comments on specific questions

### Question 1

This question was completed well by most candidates.



## Question 2

The majority of the candidates located the required files and stored them as instructed.

### **Website Authoring – CSS**

## Question 3

There were a significant number of errors and omissions. Setting the font-family: to have two font names, then the default font style caused many issues. A significant number of candidates omitted the speech marks from “Helvetica Neue” and in some cases placed them around the generic font style. There were a number of instances of sans-serif without the hyphen. Very few candidates identified that the internal gridlines of a table had to be set within the table data (td) properties rather than the table properties. Hence to obtain different internal and external thicknesses both table and td had to be specified independently. For the heights of the fonts, in the case of styles h1,h2 and p a number of candidates set height: followed by the size. Despite the question requiring all three fonts to be measured in points a significant number of candidates elected to use pixels. Style h2 was frequently found with the color: set as #993300 rather than setting the colours in RGB format and obtaining #330099. Some candidates omitted the body style definition, instead defining a background style. This screenshot was often so small it was difficult for examiners to read. Some screenshots were cropped so tightly that part of the css was omitted. Some candidates erroneously included HTML within their CSS.

## Question 4

Few candidates performed well on this question. To evaluate the stylesheet it was necessary to look for positives and negatives in the supplied file. A number of better candidates found three or more negative points but few commented on the correct syntax. Some candidates commented on the stylesheet they created stating what the stylesheet included. Many candidates attained a single mark for identifying that the stylesheet contained omissions.

### **Website Authoring – HTML**

## Question 5

This stylesheet was frequently attached correctly to the web page. There were a number of candidates who did not show all the html so it could not be verified that this was in the head section. Despite adding this correctly, many candidates did not attain this mark because they (or the automated package that they were using) had overwritten the styles set in the stylesheet.

## Question 6

This question was completed well by the majority of the candidates.

## Question 7

Although the vast majority of candidates added the correct logo in the correct place, few ensured that appropriate alternate text was added. It was evident that many people using WYSIWYG packages had alt="" in their html but did not edit this to add suitable text.

## Question 8

Many of the candidates who attempted this question were successful in setting the correct image as the anchor. More candidates than in previous years successfully completed the email link, however a significant number of candidates did not set the mailto: with the correct syntax and the text (including case) as specified in the question paper.

## Question 9

Almost all of the candidates who submitted a browser view of the webpage selected and placed the correct images as specified, the vast majority of these also set the widths of the image to 140 pixels. A significant number of candidates did not provide an HTML listing, instead giving a link to a file which could not be marked by the Examiners.

### Question 10

There were a variety of answers to this question giving a full spread of marks. Many candidates were not specific about the difference between the physical size of the image and its file size. Several did not identify that this would affect the download speed of the webpage nor that many browsers will not handle .tif files. Many candidates did, however identify that saving the file in a different file format would allow it to be suitable.

### Question 11

Few candidates showed evidence of more than one method of making the file suitable for a web page, this was frequently evidence that a copy of the image was saved as a jpeg or png file.

### Question 12

This question was completed well by most candidates.

### Question 13

This question was completed well by almost all candidates. A significant number of candidates did not provide an HTML listing, instead giving a link to a file which could not be marked by the Examiners.

### *Data analysis – Spreadsheets*

#### Question 14

Most candidates opened and saved the file, however not all inserted 2 new rows at the top of the spreadsheet.

#### Question 15

Although many candidates completed this task with accuracy a significant number introduced typing or case errors, especially transposing letters to display TMPC (instead of TMCP) and the omission of the s at the end of Projects.

#### Question 16

Most candidates set the text into a white 36 point centre aligned font on a black background. Fewer candidates set this as a sans-serif font.

#### Question 17

Many candidates completed this step successfully. Of those who did not, some did not use the external file specified in the question paper, others selected a range of cells larger than the question required and some chose to search for “Honduras” rather than the cell containing this data. A small number of candidates tried to use a LOOKUP function which would not work with the data in the csv file in its unsorted format.

#### Question 18

The majority of candidates who printed their formulae completed this step as specified.

#### Question 19

Some of the candidates who did not complete this step successfully, did not refer to the external file specified in the question paper, others selected a range of cells larger than the question required and some chose to search for “Honduras” rather than the cell containing this data. A small number of candidates tried to use a LOOKUP function which would not work with the data in the csv file in its unsorted format. A number of candidates omitted the final instruction on this question to multiply this value by the total for the local currency. A significantly smaller number rounded this value to the nearest dollar.

#### Question 20

The majority of the candidates who had entered replicable formulae completed this step successfully.

### Question 21

Although most candidates completed this successfully there were a number who did not use the most efficient method to complete this task, for example: the use of =B6+C6+D6... etc; instead of =SUM(B6:G6).

### Question 22

Few candidates sorted the data as specified. A significant number of candidates erroneously sorted both columns individually without maintaining the integrity of the data. This consequently led to follow through errors on the final search in question 26.

### Question 23

Few candidates who attempted this question completed it successfully. A number of candidates failed to give the correct format for the local currencies, even though the necessary information was available in the 1631currency.csv file. Many candidates ignored the instructions earlier in the paper that stated "Unless working in local currencies, display all currency values rounded to the nearest US dollar", many giving 2dp answers for the US dollars row

### Question 24

This question was completed well by the majority of candidates who attempted the spreadsheets section of the paper, although there were a significant number of printouts that did not display in full the contents of all cells. A large number of candidates did not display the row and column headings in this printout, rendering it impossible for Examiners to check that all cells A1 to I6 had been printed. Almost all candidates produced their printout in landscape orientation.

### Question 25

The majority of candidates printed the spreadsheet with the cells fully visible but a significant number did not print it on a single page wide.

### Question 26

Although many completed this task with accuracy, a number of candidates searched for greater than or equal to 90 rather than greater than 90.

### Question 27

This question was completed well by the majority of the candidates.

# INFORMATION AND COMMUNICATION TECHNOLOGY

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Paper 0417/32  
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. For a significant number of candidates, the html section in website authoring questions on the paper was their strongest element, although many found the cascading stylesheet questions more challenging. Many candidates appeared well prepared for this examination and the vast majority who submitted their work showed sound knowledge, skills and understanding. Most candidates completed all elements of the paper. 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 a factor in the reduction in the number of candidates achieving well on the stylesheet question.

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.

As with previous papers, there were a significant number of typographical errors in all elements of the paper. Many of these inaccuracies could have been avoided with more careful checking and error correction.

Centres **should not** staple their work, hole-punch or tie it together with string. A number of candidates lost marks owing to the holes taking out some of the header text being marked. Occasionally, scripts were tied in the middle of the pages, making them difficult to open/turn over 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 them, the candidate's name, Centre number and candidate number. It is essential that **ALL** candidates adhere to these instructions.

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

Candidate responses this year included screen shots to show evidence of the work. Many candidates produced screen shots that were extremely small, so that examiners had to use magnifying devices to try to award candidates marks. Candidates should check each printout to ensure it is large enough to be read, 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 screenshots with important elements cropped, or in the case of the browser view of the webpage so that the end of the page was truncated.

## **Comments on specific questions**

### ***Data analysis – Spreadsheets***

#### **Question 1**

This question was completed well by most candidates although some candidates saved the file again as a comma separated values file rather than as a spreadsheet and a number failed to use the specified format for the file name

#### **Question 2**

This question was completed well by most candidates although some candidates inserted only a single new row.

#### **Question 3**

The majority of candidates entered the title as specified although there were a number of typographical errors including incorrect spelling and case.

#### **Question 4**

Most candidates merged the cells as specified, although not all showed evidence of this by printing with row and column headings visible so that the Examiner could check the range of cells merged. Most candidates set this in a black 24 point font, but fewer used a serif font. Most candidates centre aligned this text.

#### **Question 5**

Although most completed this task as instructed, a surprisingly large number of candidates failed to embolden and italicise all the visible cells in the 4 specified rows.

#### **Question 6**

A significant number of candidates did not use the specified file for their lookup. In some scripts spreadsheet files were used instead of the csv format given. Sometimes the content of the csv file was pasted into the workbook. Evidence was also seen of candidates using named ranges, which must be from a spreadsheet file rather than a comma separated values file. Because the data in the csv file was unsorted this led to a number of candidates erroneously using a LOOKUP function rather than a VLOOKUP function. The use of absolute and relative referencing within the formulae was frequently correct.

#### **Question 7**

The lookup part of this question was frequently correct but many candidates failed to multiply the value by the corresponding value from the Works column. In some cases this was due to omission and in others the column width was too narrow to enable the Examiner to see the full formula.

#### **Question 8**

Many candidates used a nested IF function with three tiers rather than 2 tiers for this question. Very few of these candidates did so to trap out potential errors in order to gain the candidates full marks as efficient solutions are now required from the candidates. Most candidates used the correct syntax for their formulae but many of these included typographical (particularly case) errors.

#### **Question 9**

Few candidates used formulae that returned the correct answers in these cells. Many candidates used ROUND rather than ROUNDDOWN. Some candidates preferred solutions using the INT function and multiplying and dividing by 100 to obtain the required 2 decimal places. Many simply multiplied by 100 to return values that were far too large.

#### Question 10

This question was completed well by the majority of the candidates, of those candidates who did not gain this mark, the majority were not displaying the formulae in full rather than making errors in their replication.

#### Question 11

This question was completed well by the majority of the candidates. The occasional candidate added each cell manually e.g. =H17+H18+H19... rather than using the SUM function, which, although it works, was not deemed the most efficient solution.

#### Question 12

Few candidates completed this as specified. Three columns of figures should have been formatted in Indian Rupees with 2 decimal places. The majority of candidates only formatted the lower two columns.

#### Question 13

Many candidates performed some form of sort on the data and obtained one of the two marks, sorting either the Annual salary or Job Description but not both. A significant number of candidates did not maintain the integrity of the data during the sorting process.

#### Question 14

This question was completed well by the majority of candidates who attempted the spreadsheets section of the paper, although there were a significant number of printouts that did not display in full the contents of all cells. A large number of candidates did not display the row and column headings in this printout, rendering it impossible for Examiners to check that all the required cells had been merged. Almost all candidates produced their printout in landscape orientation.

#### Question 15

The majority of candidates printed the spreadsheet with the cells fully visible but a significant number did not print it on a single page.

#### Question 16

Most candidates made the appropriate changes to the data but modelling marks were only awarded if the changes made to the employees data led to changes in the resulting figures and total wage bill. Some scripts were seen where the data had been changed yet the resulting cells and the total remained the same.

#### Question 17

The majority of candidates printed the spreadsheet with the cells fully visible but a significant number did not print it on a single page.

#### *Website Authoring – HTML*

#### Question 18

This question was completed well by most candidates. Most attained a structure as shown in the diagram on the question paper. A number of candidates set the wrong table width; 100% was the most common incorrect width.

#### Question 19

Most candidates placed the image as specified but a small number of these did not set the image to 730 pixels wide with the aspect ratio maintained. There were a number of minor image distortions seen, and some candidates' scripts which had this image showing significant distortion.

### Question 20

This question was completed well by almost all candidates, where this was not correct the third image was usually the incorrectly selected one.

### Question 21

Although the vast majority of candidates added the images in the correct place, few ensured that appropriate alternate text was added, particularly to the logo. It was evident that many people using WYSIWYG packages had alt="" in their html but did not edit this to add suitable text. Many candidates added appropriate alternate text to the 4 images placed in step 19 but failed to do so with the logo.

### Question 22

Although many candidates completed this task with accuracy a significant number introduced typing or case errors. Most candidates set the text into style h1.

### Question 23

Most candidates completed this task with accuracy and set the text into style h2.

### Question 24

This was not completed well by all candidates, few set the table using margin-left:auto and margin-right:auto which are the current style attributes, many preferring to use align=center in the html. Although this has now been deprecated it was accepted as a valid answer for this examination session as it was a valid method of aligning the table when the candidates started their IGCSE course. This will no longer be accepted after this year's examinations.

## **Website Authoring – CSS**

### Question 25

There were a significant number of errors and omissions. Setting the font-family: to have two font names, then the default font style caused many issues. A significant number of candidates placed Arial before Helvetica which changed the order the browser would use to locate each font. There were a number of instances of sans-serif without the hyphen and a few with san-serif (omitting the 's'). Very few candidates identified that the internal gridlines of a table had to be set within the table data (td) properties rather than the table properties. To have no visible gridlines both table and td settings must be correct. There were many different ways of doing this with some creative solutions from some candidates. For the heights of the fonts, in the case of styles h1 and h2, a number of candidates set height: followed by the size. Despite the question requiring both fonts to be measured in pixels a significant number of candidates elected to use points. Style h2 was frequently found with the color: set as #00ffff rather than setting the colours in RGB format and obtaining #ffff00. Some candidates omitted the body style definition, instead defining a background style to set the background colour to black. There were frequent spelling errors, with candidates preferring the English spelling of centre to the center required by the browser. This screenshot was often so small it was difficult for examiners to read. Some screenshots were cropped so tightly that part of the css was omitted.

### Question 26

Most candidates attached the stylesheet in the head section of the html, some did not use the head section and others embedded in-line styles which over-wrote the styles from the stylesheet. A significant number of candidates failed to submit copies (screenshot or printed) of their HTML. They generally typed or pasted a copy of their local url for the file, perhaps in the belief that Examiners had access to it.

### **Question 27**

Candidates selected a variety of different methods for submitting these notes, the majority selecting presentation authoring packages and others opting to produce word processed or desktop published submissions. All of these solutions were acceptable. Many candidates attempted this question, but the vast majority discussed their use of brand-name packages such as 'Photoshop' rather than using generic package names and therefore did not gain the marks. A considerable number of candidates also ignored the question which related to reducing the dimensions of the image and submitted general answers about image size, the reduction in image resolution being the most frequently seen incorrect answer.

### **Question 28**

Most candidates who attempted this question described how they would perform these operations rather than evaluating the methods that they have suggested. An evaluation (in the context of this question) will often include positives and negatives for each method and a conclusion to suggest which method would be the most appropriate for the task and why, at this point factors like download speeds for relative image file sizes should have been included. This was only seen on a few occasions.

### **Question 29**

Few candidates demonstrated the depth of knowledge to answer the bits per channel part of this question. The most common incorrect answer was 24 which would be the total number of bits for a standard jpeg image. The most appropriate file format part of this question elicited many correct answers. The most common incorrect answer appeared to be jpeg which does not store moving images.

### **Question 30**

Few candidates attained full marks for this question which related to one of the updated sections of the syllabus. There appeared to be lots of guessed answers to these 4 statements and a significant number of candidates who had made no attempt to answer them. Answers to this question were noticeably centre-dependent.