# INFORMATION TECHNOLOGY

Paper 0418/01 Written

# **General comments**

Candidates performed creditably on this paper. Candidates appeared to have sufficient time to record all their answers with very few candidates failing to answer all questions. There were, however, few very high marks and, similarly, few very low marks. Candidates found difficulty with the chip and pin question as well as the question about automatic stock control. A disturbing trend was the number of candidates who had learnt answers from previous mark schemes off by heart. This led to many strange answers on some questions. This practice can cause candidates to lose many marks as they do not necessarily understand the concepts they are memorising. The wide scope of applications employed in questions on this paper meant that candidates were unable to gain high marks unless they had revised thoroughly. In addition there were aspects of Systems Analysis which a number of candidates appeared to be unfamiliar with. Many candidates remembered methods of implementation but were unable to give reasons regarding their choice.

Expert systems, once again, proved to be a topic which candidates have little knowledge of.

# Comments on specific questions

#### **Question 1**

Nearly all candidates gained full marks although some thought that the magnetic stripe reader was an example of MICR

# **Question 2**

The great majority of candidates gained both marks but a small minority only gained the mark for buzzer. Memory stick was a popular wrong answer.

# **Question 3**

Many candidates did well though a good many answered incorrectly that an Optical Character Reader is used to read information from bank cheques.

# **Question 4**

Many gained two marks and some candidates gained full marks. Common errors were bank cheques for (b) and dot matrix printer for (d).

# **Question 5**

Unfortunately most candidates failed to give the 'without permission' part of the answer. Many answered that it was illegal to make a copy of software or sell software even though with a licence people are allowed to.

# **Question 6**

Candidates answered this very well with many gaining full marks. Marks were lost by a few candidates who gave left instead of right and a small minority of candidates omitted one instruction causing them to lose a mark.

- (a) Many candidates did well on this question giving some good answers.
- **(b)** Unfortunately, not many candidates could give uses with some thinking that ROM was a CD.

# **Question 8**

On the whole this was answered well but some candidates, perhaps having learnt the answers to a question on a previous paper off by heart, gave health reasons rather than safety.

#### **Question 9**

- (a) A number of candidates did not read the question carefully. It required the candidate to give details of a holiday and not details of a customer.
- (b) Candidates still confuse visual verification with proof reading. This answer on its own will not gain credit. Candidates must expand their answers and include the concept of comparison, either with the original document, or, in the case of double entry, between the two versions.
- (c) This question was answered poorly by those candidates who had memorised definitions without understanding them. Candidates generally gained marks for naming two validation checks but very few gained marks for describing the differences.
- (d) Again, candidates gained marks for listing methods but very few could give advantages and disadvantages a prerequisite for a 'discuss' question.
- (e) A surprisingly large number of candidates failed to give correct items of each type of documentation and still fewer appeared to understand the purpose of each.

# **Question 10**

Many candidates gained marks for 'unemployment' and 're-training'

# **Question 11**

- (a) A few candidates had, again, memorised answers to previous paper questions and consequently gave answers relating to how such a system would be used rather than how it would be created. Many candidates failed to gain the mark for evaluation concentrating on giving generalised systems analysis answers rather than those specific to a doctor's use.
- (b) Most candidates answered this well

#### **Question 12**

- (a) Candidates were able to gain marks for this question though some still answer heat sensor instead of the correct temperature sensor. Some candidates gave vague answers such as rain sensors or wind sensors which could not be given credit.
- **(b)** Most candidates gained both marks, though a few gave ADC without saying why it was needed.
- (c) Many candidates gained some marks here. A number of inaccurate answers were given here. An example was 'computers can work for 24 hours' despite the fact that humans can also do this. Other examples related to danger and humans needing paying despite the fact that the question related to a School weather station run by pupils.
- (d) Common incorrect answers referred to the use of databases despite the question relating to a 'word processed' report. Many candidates, however, did well on this question. A disturbing occurrence was the number of candidates who gave brand names of software despite the fact that the syllabus clearly states that these will not be given any marks.

Most candidates gained at least two marks but quite a number identified an online application as well as two batch processing answers. Inputting new details of stock tended to be ignored by many candidates as a batch processing application.

#### **Question 14**

- (a) The great majority of candidates correctly identified the network topologies.
- (b) Very few candidates were able to give two advantages and two disadvantages. A lot of the responses to the disadvantages part of the question failed to give sufficient detail with vague answers relating to hacking and viruses being common.

# **Question 15**

- (a) to (f) The vast majority of candidates answered these questions correctly but a few candidates dropped marks for counting cells rather than fields or rows whilst a smaller number of candidates gave cell contents rather than field names.
- (g) Candidates did not do very well on this question with few showing any real understanding of automated stock control.
- (h) Very few candidates appeared to understand chip and PIN technology with many referring to swiping using a magnetic stripe reader. Very few appeared to understand that chips store the PIN and that contact with the bank regarding sufficient funds checking and payment does not happen until the PIN is validated.
- (i) Most candidates gained both marks
- (j) Most candidates gained at least a mark but many were unable to make three succinct points
- **(k)** This question was answered quite well with many candidates gaining a good number of marks.

# INFORMATION TECHNOLOGY

Paper 0418/02 Practical Test A

# **General comments**

The paper continued, as indicated in sample papers for 2007, to cover the syllabus in more varied ways. For example, this paper complemented some of the presentation skills previously seen only in paper 3. Although the same set of skills were tested across the two papers, some of the skills were tested in slightly different ways, for example, image control skills included precise placing, resizing, cropping and flipping of images. Some candidates were not able to carry out these activities. Also, the database reports included label production which, although explicitly listed on the syllabus, presented some candidates with new challenges.

Overall the paper worked well, with some candidates producing fully worked, very accurate papers. The marks then covered the full range to zero. The paper started with familiar tasks of e-mailing and document production that would have given access to up to half the marks. Some candidates did not print this document, and this may have been due in part to the instruction to print coming at the end of the document production / database section of the paper. Candidates need to be reminded of the need to print this document as the end of the examination is approaching, even if they have not completed all tasks to this point. The presentation part was often well done and could contribute a significant number of marks to a candidate who found, for example, difficulty with some of the database reports.

At various points in the paper, candidates are reminded to spell-check and proof-read their document. This is not intended to be a test of their knowledge of English grammar, so no grammatical errors are intended to be present in the document. If spelling errors are deliberately inserted into the document, then these are checked to be very obvious first or only spelling suggestions in the dictionary. Other words that may be changed by candidates will not attract penalties – an example from a recent paper was Dygitell which was changed to digital. The proofreading skills are a reminder to the candidate to check overall layout and consistency in the presentation of the document. A long document with margins set at four inches instead of four centimetres should alert the candidate to check back with the paper. Similarly reports running to many pages will also generally indicate some error of selection.

Centres are again reminder to check that the facilities are all available to candidates in time for the examination. The candidates should be comfortable and familiar with the hardware setup and software. It is upsetting for the candidate when "Access was not available on any station, so the candidate could not complete this section" or "when the Supervisor became aware that PowerPoint was not functioning on the machine he took steps to install the software" – these quotes are not quite verbatim, but give the gist of a Supervisor report.

# **Comments on specific questions**

# Section A

# **Question 1**

This is an initial e-mail that provides the first file to the candidate while giving instructions to search for, download and save another file. No printed evidence of this message is required.

# **Question 2**

The screenshot provides evidence of the successful search. This was provided by many candidates.

The e-mail message was generally well done. There were accuracy errors (ucles for cie was not accepted) and sometimes the blind copy did not show up – indicating a need to check the software to ensure it will enable all evidence to appear. Some candidates may need a separate screen shot to show this and such evidence would be acceptable.

#### **Question 4**

Generally the correct (.rtf) file was attached. If the (.csv) file was attached, then this was marked as incorrect.

#### **Question 5**

Most candidates printed a copy of the message.

# **Question 6**

The correct file was accessed either by the Internet search or, in case of Internet problems from a local search, or in last resort by provision of the file to the candidate.

# Questions 7 to 9

The page was mostly set to landscape as specified, but margins / page size were incorrect in a significant number of candidates' work – possibly resulting from printer / document conflicts?

#### **Question 10**

Some of the header and footer items were almost always correctly placed, but the centred and right aligned ones often did not match the margins of the document text. An automated file name was not always inserted at the top left.

# Questions 11 to 15

The body text was mostly correctly formatted to two columns with a correctly selected font type, size, alignment and spacing, but all possible errors of single column, incorrect column spacing, serif font, single line spacing, inconsistent alignment or point size were observed.

# Questions 16 to 26

The title page with single column layout, correctly entered and a formatted heading and subheading was generally well executed, although errors of font family, spelling, alignment, column layout and position of the page break were all observed. The subheading was often underlined as well as italicised.

# **Question 27**

The correct paragraph was generally moved to the correct place. This often gave rise to the need for the proof reading check to ensure consistency of paragraph spacing was preserved.

## **Question 28**

The bulleted list was usually modified correctly, but sometimes a numbered or lettered list was substituted and this was marked as incorrect.

# Questions 29 to 31

The table was usually inserted in the correct place, with the correct number of rows and columns. The text was usually entered and formatted correctly.

# Questions 32 to 35

The two images were generally inserted at approximately the right place. There were marks for accurate resizing, accurate positioning with text wrapping set on, cropping and flipping. While these skills were often accurately demonstrated, there were a significant number of candidates who did not apply text wrapping, or who did not crop the image or rotated to 90 or 180 degrees, or some who did nor place the image accurately relative to the text.

#### **Question 36**

The document was saved here. While there was no instruction to print here, the weaker candidates would have a reference point here to print their document if they found time or other restrictions later on.

# Questions 37 and 38

The evidence of the field structure was generally provided and correct. The formatting for the *Price* field was always checked on the report to see it was correctly applied in two decimal places.

#### Questions 39 and 40

The three records were generally accurately added to the database when seen in the Reorder List report.

#### Questions 41 and 42

Of the candidates who tackled the database questions, this was the most frequently produced report. Often it was largely correctly structured, but errors were made in accuracy of data entry, the creation of the calculated field and the formatting of its data, the selection of records or sort order, and the total value calculation, formatting of the data or presenting the associated label.

#### Questions 43 and 44

The report formatted as labels was based on a selection of records, sorted in a particular order. Candidates who tackled the report could gain marks for the correct selection of records, presented in the required order even if they could not present the records as labels side-by-side. The labels required title text on each one, and this was relatively rarely achieved accurately, including the centre alignment. The labels also required only selected fields to appear, each on a separate line. No penalty was applied for field names appearing, or for the formatting of the *Price* field data, if not currency, as this was not specified in the question.

# Questions 45 to 47

The summary report was similar to previous papers, but needed to be based on a selection of records. When available, it was generally placed correctly in the text document.

#### Questions 48 and 49

The document was to be saved and printed at this point with a reminder to spell-check and proof-read again. A number of candidates who surely might have done work on the text document did not present any printed evidence for this work.

## Questions 50 to 56

Most candidates who presented the presentation section of the paper managed to import the six slides from the source file. This section of the paper complemented the presentation work done on paper 3 where the emphasis was on structuring a slide master. Here the emphasis was on acquiring text for slides from a formatted document, then adding a slide with text formatted as heading and subheading, editing text on a slide, adding presenter notes, and setting transitions and animations to the presentation.

# Questions 57 to 59

The printed evidence required was:

- an outline print (minimising printing) often all slides were printed individually,
- a print of one individual slide to show editing and the presenter notes,
- a print or prints to show transitions and animations applied. When the outline print was absent, these often served to show correct importing of the slides.

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# INFORMATION TECHNOLOGY

Paper 0418/03 Practical Test B

# **General comments**

The majority of candidates completed all elements of the paper. There were vast differences in the range of results from Centre to Centre. Fewer candidates omitted sections of the paper than in previous sessions. The bar chart question caused a number of candidates some problems. For a significant number of candidates the website authoring section of the paper was their strongest element, a follow on from the results found in recent sessions. This paper gave a good spread of marks. Candidate errors were spread evenly over the sections of the paper. There were a significant number of typographical errors, although less that those found last session. These could have been avoided with more careful proofreading and correction.

A very small number of candidates failed to print their name, Centre number and candidate number on every document submitted for assessment, in this session. Without clear printed evidence of the author of the work, Examiners were unable to award any marks for these pages. It is not acceptable for candidates to hand annotate their printouts with their name as there is no real evidence that they are the originators of the work, and hadn't simply collected the work of another candidate from the printer, and annotated this with their details.

Several candidates omitted one or more of the pages from the required printouts. Some candidates submitted multiple printouts for some of the tasks and failed to cross out those printouts that were draft copies, although there were less occurrences of this than in previous sessions. If multiple printouts are submitted and the draft versions are not crossed out, Examiners will only mark the first occurrence of that page.

A small number of candidates failed to printout the html code for the website authoring, some omitted the browser view but submitted the html printouts and a small number failed to print the formulae view for the data handling. In each of these cases it was impossible to award many marks to the candidates without the evidence of their structure and syntax. A number of candidates did not print the webpage 'as it is viewed in your browser', using website editing software to show this information, this is not 'in a browser' so could not be credited with the marks for this section.

Please note that it is not necessary to staple together the work, work should be submitted in the ARF. Some Examiners experienced difficulty marking some pages from some Centres, as candidates had stapled all their work together in such a way that it was very difficult to separate the sheets in order to view and mark all of the work.

Overall the paper performed very well.

# Comments on specific questions

#### Data Analysis

# **Question 1**

This was performed well by almost all candidates.

Although this question was answered correctly by most candidates, there were a number of errors in the methods used to answer the question, the most common being to not use 'the file J8CODE.CSV'. Some candidates copied the data from this file and placed it elsewhere rather than referring the lookup reference to the original source file. The majority of candidates used either a LOOKUP or a VLOOKUP function for this question. A number of candidates did not correctly use both absolute and relative referencing for this task. A number of candidates failed to create this function using a method that could be easily replicated for each of the 7 items shown.

#### **Question 3**

This was performed well by almost all candidates.

#### **Question 4**

Although this task appeared relatively easy, a significant number of candidates failed to used the correct names for the cells including the correct capitalisation. A smaller number of candidates named the wrong cells or used cell referencing in **Question 9** rather than applying the cell names.

#### **Question 5**

This was performed well by almost all candidates.

#### **Question 6**

This task was not completed by a significant number of candidates, although the majority performed this well.

#### **Question 7**

There were mixed responses to this question. Candidates were expected to use absolute and relative references (as specified in the question paper), to ensure that this formula was replicable. A significant number of candidates ignored this requirement and were penalised as a result of this. Some candidates incorrectly referred the COUNTIF to cells within the range being counted rather than to cells B7 to B13.

# **Question 8**

A number of candidates did not answer this question. Most used the SUMIF function but a number did not use absolute and relative referencing or ensure that the formula was easily replicable.

# **Question 9**

This question caused some problems for a number of candidates. Many candidates produced a solution using nested IF statements, some did not use the correct referencing, named cells or appropriate absolute and relative references. A significant number of candidates failed to create a default option of the number 0 if the reference was not C P or I. Some candidates attempted this with "0" which set a text format to the cell, but ensured other cells could not use this text as a calculable value.

# **Question 10**

This was performed well by almost all candidates.

# **Question 11**

This was performed well by almost all candidates.

# **Question 12**

A small number of candidates did not complete this task.

This was performed well by almost all candidates.

#### **Question 14**

Despite clear instructions about placing the candidate's name, Centre number and candidate number in the header a number of candidates did not insert these details into the header, some using the footer and others adding these to cells within the spreadsheet.

#### **Question 15**

A small number of candidates did not change the page orientation.

#### **Question 16**

This was performed well by almost all candidates, although there were some follow on errors from step 14.

#### **Question 17**

Some candidates failed to hide the specified rows.

#### **Question 18**

A small number of candidates could not filter the data from the given criterion. Some candidates attempted to delete the rows rather than searching/filtering for the correct data.

#### **Question 19**

A small number of candidates could not filter the data from the given criteria. Some candidates produced two separate printouts, one for **PU** and the date and one for **SA** and the date. Some candidates searched for **PU** or **SA** but omitted the criterion for the date from their search. A number of candidates produced the correct search but did not leave the rows and columns hidden as specified.

# **Question 20**

The creation of a chart was new to the syllabus this year and a significant number of candidates omitted this question. Of those candidates who attempted this question, many produced excellent results and attained high marks. Some candidates did not select the data for Department and Total Duration only. A significant number of candidates did not produce a vertical bar chart, following the erroneous wording of a specific spreadsheet package and generating a bar chart with horizontal bars. There was an expectation that copy typing of the chart title would be 100% accurate, a number of candidates did not attain the required level of accuracy for this part of the question. Despite the instruction to ensure that all category axis labels were fully visible, a number of candidates did not follow this instruction. Several also included a legend when instructed not to.

# Website Authoring

# **Question 21**

Almost all of the candidates downloaded the files successfully.

# Questions 22 and 23

A number of candidates did not create an external stylesheet. There were a large number of small web pages saved in html format with the styles included, which should have been saved as cascading stylesheets (in .css format). Several candidates omitted colour from the list, assuming that the web creation package would generate this automatically. Some of the font size settings in the stylesheet had no units, or the wrong units attached to them, despite being instructed to use pixels. Other common mistakes were the use of incorrect syntax on the "font-family". Some candidates did not appear to realise that fonts placed in brackets within the "font-family" settings of the style will not work and will negate the style when it is applied to the web pages. A very small number of candidates failed to print the stylesheet. Several candidates set style h1 to bold but failed to set h2 to bold.

Many candidates created the homepage correctly, with all of the items in the correct position and the heading styles (h1 h2 h3, li and p) applied to the correct text.

#### **Question 25**

The external stylesheet was generally attached correctly. A small number of candidates used an absolute reference to their hard drive or local network drive. Some candidates attached the stylesheet correctly, then over-rode these styles by including new definitions in the page or amendments to the styles with in-line style commands. These errors were still prevalent despite clear instructions to the candidates in the question.

# **Question 26**

Most candidates added their name and numbers, some omitted the 'Last edited by' and a number of candidates did not set this text into style h3.

#### **Question 27**

Many candidates answered this well, although a small number of candidates did not set this text into style h1. There were a significant number of data entry errors in this heading, the most prevalent being case errors.

#### **Question 28**

The table was often created with the correct number of rows and columns, although this year many more candidates either placed this table within another table, or included additional rows at the top or bottom of this table.

# **Question 29**

The majority of candidates answered this well, although a number of candidates did not merge all of the required cells.

# **Question 30**

The response to this type of question was better than previous sessions, although in some cases the cell padding was set correctly but not the required cell spacing. A number of candidates failed to set the width to 100%, or set it to 100% after previously defining this within another table with different settings. A number of candidates specified the table width as 100 pixels.

# **Question 31**

This was generally well done by the vast majority of candidates.

# **Question 32**

This was generally well done by the vast majority of candidates. A minority of candidates placed text in the wrong cells, or applied the wrong formatting. There was a significant follow through of errors from the incorrect stylesheet. The most significant errors occurred in the application of the paragraph and list styles.

# **Question 33**

Almost all of the candidates correctly placed all three images.

# **Question 34**

The file was placed in the correct cell by the vast majority of candidates, but there were numerous candidates who failed to correctly resize the image, or to align the image in the centre of the cell.

A significant number of candidates did not use the provided source file to create the menu, either retyping or editing it so that it was no longer intact or in some cases no longer in the supplied table, despite the question paper instructing candidates to apply style h2 to the text within this table. A number of candidates omitted this instruction completely. There were a number of candidates who placed this table within another table on the page.

#### **Question 36**

The response to this type of question was better than previous sessions, although in some cases the cell padding was set correctly but not the required cell spacing. A number of candidates failed to set the width to 100%, or set it to 100% after previously defining this within another table with different settings. A significant number of candidates specified the table width as 100 pixels, rather than 100%.

# **Question 37**

This was generally well done by the vast majority of candidates.

#### **Question 38**

The most common error was made by a significant number of candidates who set the pathway for this file as an absolute file reference within their network system or hard drive which would not work when uploaded as a web page. There were a number of candidates who did not open the file in a new target window called '\_history', many used the default settings of their web authoring package and had not edited this in the html code. Some candidates set the title of the page to '\_external'. One or two candidates set the default window setting to open in the ' history' window.

#### **Question 39**

Few candidates set the anchor correctly at the top of the webpage, this should have appeared at the start of the body text section within the html code. A number of candidates did not name the anchor correctly. Many candidates omitted this question. There were a number of follow on errors where the link from the text 'Home' was not created to this anchor. Some candidates created the anchor but did not use the correct anchor name in their link.

# **Question 40**

A significant number of candidates from a range of Centres failed to correctly print one of the required printouts. A number omitted the html printout completely. A significant number printed the 'browser view' from within a web authoring package rather than within a web browser. These do not always show that the web page works, a small number of candidates printed this view from both the web authoring package and from a web browser. These printouts did identify many significant differences, particularly relating to the inclusion and display of images within the page.

# **Question 41**

Almost all of the candidates correctly placed and resized the image. A small number set the image width correctly but did not maintain the aspect ratio of the image.

# **Question 42**

This was generally well done by almost all of the candidates.

# **Question 43**

This was generally well done by many of the candidates. A number of candidates had absolute references in the filename which ensured that this reference would not work on any web browser, as the file path referred to a local hard disk or network drive, rather than the current directory, which would be uploaded with the webpage.

The external stylesheet was usually attached correctly. A small number of candidates used an absolute reference to their hard drive or local network drive.

#### **Question 45**

A number of candidates failed to correctly print one of the required printouts. A number omitted the html printout completely.

# **Presentation Authoring**

#### **Question 46**

This was generally well done by the vast majority of candidates.

# **Question 47**

A large number of candidates did not create the lines on the master slide. Many appeared to redraw or copy and paste the lines from one slide to another, leading to inconsistent layout.

#### **Questions 48**

A number of candidates included a slide number but did not place it as specified in the question paper. The most common misplacement was leaving the page numbering in the default position set by their package.

#### **Question 49**

This question was well done by the majority of candidates, although several candidates failed to place the image so that it did not overlap the diagonal line.

#### **Question 50**

Most candidates achieved this step, although a number ignored the instruction to right align this text and left the candidate details either centre aligned or left aligned within the horizontal green stripes.

# **Question 51**

This text was added correctly on the first slide but not on the master slide by a considerable number of candidates. Subsequent slides had evidence of this text but in different positions on the slide. There were a number of errors in data entry, both in terms of spelling and case. A number of candidates used a serif font rather than a sans-serif font.

#### **Question 52**

The text was generally added to slides 1 and 2, but most frequently was added in a sans-serif font, rather than in a serif font. A considerable number of candidates omitted placing the chart from **Question 20** into slide 3. The majority of those candidates who did place this on slide 3, did so with no overlap of the green lines and obtained full marks for this section.

# **Question 53**

Although almost all candidates printed the slides, a significant number printed the slides in pure black and white which meant it was not possible to assess the use of colour in the slides through grey scale. There is no requirement to use colour printing facilities, if black and white printers are used candidates should ensure that they set the printers to grey scale to distinguish different shades.