## INFORMATION TECHNOLOGY

## Paper 0418/01

Written

## General comments

Candidates did not perform as well as in previous years despite the paper being no more difficult than in the past. Candidates appeared to have sufficient time to record all their answers; very few candidates failed to answer all questions. There were, however, a number of candidates who gained quite low marks. Some candidates found difficulty with the chip and pin question and the questions about evaluation and the expert system question failed to produce many good answers.

In common with other sessions, there were a 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 appear not to understand the concepts which they are memorising. This was particularly noticeable with some candidates' responses to the expert system question. 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 the disadvantages of them.

## Comments on specific questions

## Question 1

Nearly all candidates gained full marks although a small number of candidates confused the laser printer with a graph plotter and the pin pad with a sensor.

## Question 2

The majority of candidates gained both marks but a minority only gained one mark. A common misconception was that memory sticks, DVDs and CDs are magnetic media.

## Question 3

Many candidates did well, although a number of candidates thought that magnetic stripes can store very large volumes of data.

## Question 4

Many candidates found it difficult to gain full marks though most scored well.

## Question 5

Parts (c) and (d) were answered well by candidates but there were many incorrect answers for backups and PIN.

## 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.

## Question 7

Most candidates gained the marks for ring and star networks but fewer managed to get the diagram for the bus network correct.

## Question 8

Many candidates answered cheaper and quicker. Teachers are reminded that such answers do not gain marks unless qualified.

## Question 9

(a) Candidates often failed to describe the method. Many just gave one word answers and were not awarded the marks. Those candidates who did go on to describe the method often failed to give the advantage.
(b) Many candidates gained marks for details of the book but only a few gained a mark for designing an input screen or giving correct spacing.
(c) This question was not answered well by a number of candidates with many borrowing answers from $9 b$ and naming fields rather than referring to file structure. A number of candidates referred to general design features rather than those specific to file structure.
(d) A number of candidates confused this with methods of implementation when the question clearly required them to describe types of test data. Many candidates gave very good answers, particularly those who used examples to describe the types of data.
(e) Candidates were often able to name the methods but often failed to give a disadvantage. Many went on to describe the method which was not required by the question.
(f) This question was poorly answered with many candidates unable to give valid answers. Many candidates were too vague in their answers and only a minority gave answers sufficiently specific to be awarded the mark.
(g) This question was well answered with many candidates gaining full marks. There were a small number of candidates who gave safety hazards instead of health hazards.

## Question 10

This question was not well answered. Most candidates appeared to have little idea regarding either device. Many tried rewording the name of the device by saying a chip reader reads PINs.

## Question 11

Most candidates did well although a number managed to get the last two applications the wrong way round.

## Question 12

(a), (b) Most candidates gained both marks
(c) Many candidates gained the mark but a small number put the formula the wrong way around.
(d) Many candidates failed to get all three marks as they appeared to lack the ability to write down the correct set of instructions. It seemed that many knew how to do it but could not put their thoughts down in words.
(e) This was badly answered; many candidates answered either 5 or 7.
(f) This was not well answered. A number of candidates did not appear to understand the topic. A variety of application packages such as DTP model, presentation model and spreadsheet model were given as answers.
(g) Common incorrect answers referred to cheaper and faster. A number of candidates gave answers here which would have been more appropriate in 14d.

## Question 13

Candidates answered this question poorly with many showing no sign of understanding. A number of candidates had learnt off by heart how an expert system is created and wrote that down rather than answering the question.

## Question 14

(a), (b), (c) and (d) were all well answered by the majority of candidates.

## Question 15

(a) The candidates seemed to be unable to describe this in any detail. The majority of candidates who gained marks for this question did so by naming the hardware. A disappointingly large number of candidates thought that this was referring to the use of CCTV cameras or video recording work activities with the recordings to be distributed to other workers.
(b) Candidates gained marks generally for mentioning the savings resulting from travelling/conference rooms not being required.

## Question 16

Most candidates did well on this question but occasional incorrect answers were present.

## Question 17

Most candidates gained 2 marks for reference to printing costs (DTP) and limited audience (presentations). Very few mentioned the fact that presentations allowed sound, video, animation and also allowed interactive discussion.

## Question 18

Many candidates described features of the internet without giving the advantages and disadvantages. A number failed to read the question carefully and instead of discussing the effect on the general public but on companies instead. Some candidates did manage to score highly.

# INFORMATION TECHNOLOGY 

Paper 0418/02
Practical Test A

## General comments

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 emailing and databases. Some candidates attempted the database work using a spreadsheet which did not have the required functionality to complete all of the database questions in this paper. The document production part was often well done and gained many candidates the bulk of the marks that they attained on this paper.

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 three inches instead of three 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 reminded to check that the facilities are all available to candidates in time for the examination. The candidates should be comfortable and familiar with the setup of the hardware and software they are to use in the examination.

## Comments on specific questions

## Question 1

This is an initial email that provides the first file to the candidate as an attachment to be saved while giving instructions to search for, download and save another file. No printed evidence of this message is required.

## Question 2

A screenshot provides evidence of the successful search. This was provided by many candidates, although a significant number of candidates did not show evidence of searching for the specified file, providing a general search page instead.

## Question 3

The email message was generally well done. There were accuracy errors (ucles or cambridgeassessment were not accepted in place of cie) 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. A number of candidates failed to include the correct text in the body of the email.

## 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

Candidates were able to use the data file to create their database using the field names given in the provided file.

## Question 7

Generally candidates were able to provide screenshot evidence of the data structures. This would not be possible if a candidate were encouraged to use a spreadsheet package for this task.

## Questions 8 to 10

The three records were generally accurately added to the database. Evidence for this was seen in the Supplier Order List report.

## Questions 11 and 12

Of the candidates who tackled the database questions, this was the most frequently produced report. This report was often completed with no errors. The few candidates who did not get this completely correct made errors in the title for the report, in the searching for three countries or ensuring that only the three required fields were fully visible, printing the country field as well as the specified ones.

## Questions 13 and 14

The majority of the candidates who tackled the this report made a reasonable attempt at these questions. The searching was often correct, although some candidates did not perform any search and included all the records. Often the report was largely correctly structured, but errors were made in accuracy of data entry or the creation and display of the calculated field. A significant number of candidates failed to calculate (or display) the total cost of the extracted products. Others did not format this total (or the Cost column) into currency format with 2 decimal places. The label to show this was the total cost of the order was not always displayed or was not accurately entered.

## Questions 15 and 16

This extract required the selection of 5 records and 4 specified fields. A significant number of candidates did not display only the 4 required fields; some also included the "Special" field. This made the removal of text wrapping and fitting of this extract (in tabular form) within the column width extremely difficult.

## Questions 17 to 23

The chart was not completed correctly by a significant number of candidates. Many did not select the data from May to December, but included the whole year. A number of candidates did not show all labels in full, there were a number of omissions and typographical errors, including errors in capitalisation in the titles. Many candidates included the legend, but some did not use meaningful series names to identify the two categories of products.

## Questions 24 to 28

The page was mostly set to portrait as specified, but margins and page size were incorrect in a significant number of candidates' work - possibly resulting from printer / document conflicts. Some of the header and footer items were almost always correctly placed, but the centred and right aligned ones frequently did not match the margins of the document text. An automated file name was not always inserted at the bottom left.

## Questions 29 to 32

The body text was mostly correctly formatted as left aligned 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. The most frequently discovered error was the use of a sans-serif font rather than a serif font for the body text. A number of candidates did set the body text to 12 point but failed to set the table to the same point size.

## Question 33

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.

## Questions 34 to 43

There were a number of typographical errors in these questions, in terms of spelling, capitalisation and punctuation. The most frequently discovered error was the failure to use a sans-serif font.

## Questions 44 to 45

The vast majority of candidates set the bulleted list to a numbered list, but fewer candidates indented the numbered list to at least 2 centimetres.

## Questions 46 to 51

The table was generally well produced. There were errors in all areas of editing and formatting the table. The most significant errors were in the shading and centre alignment of the top row of the table. For many candidates the added column extended the table well into the margin.

## Questions 52 to 53

The image was generally inserted at approximately the right place. There were marks for accurate resizing and accurate positioning with text wrapping around the image. While these skills were often accurately demonstrated, a significant number of candidates did not apply text wrapping, or did not crop the image or resize it accurately. Some candidates did not place the image accurately relative to the correct text. A large number of candidates did not crop the coffee pot, but did crop to leave the tea cup.

## Question 54

The inclusion of a summary report was similar to previous papers. When available, it was generally placed correctly in the text document, but attention needed to be paid to spacing before and after the extract.

## Question 55

The page break was inserted accurately by the majority of candidates, but there were some who inserted at the wrong place in the text or not at all at this point in the paper. Sometimes a blank page resulted from this action and this would need to be removed.

## Questions 56 and 57

The chart was generally placed at the correct point in the document, but sometimes included a large amount of unnecessary white space following it.

## Questions 58 and 59

The document was to be saved and printed at this point with a reminder to spell-check and proof-read again. A number of elementary errors were observed in the scripts including a deliberate spelling error placed into the source data file.

# 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. Some candidates omitted sections of the paper, particularly the spreadsheet and web authoring sections. The pie chart question was new to the syllabus this year and 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, particularly in the presentation authoring area, where careless errors appeared to be more prevalent than those relating to lack of knowledge. These could have been avoided with more thorough proofreading and correction.

Only a very small number of candidates in this session failed to print their name, Centre number and candidate number on every document submitted for assessment. Without clear printed evidence of the author of the work, examiners were unable to award any marks for these pages. It is not acceptable for candidates to annotate their printouts by hand with their name as this does not provide sufficient evidence that they are the originators of the work and have not written their name on the work of another candidate.

Several candidates omitted one or more of the pages from the required printouts. Some candidates submitted multiple printouts for some of the tasks and although the majority of candidates crossed out those printouts that were draft copies, some candidates failed to do so. If multiple printouts are submitted, 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

## Presentation Authoring

## Question 1

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

## Question 2

A significant 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.

## Question 3

A number of candidates failed to include an automated slide number.

## Question 4

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 red lines.

## Question 5

Most candidates achieved this step, although a number ignored the instruction to place this on the master slide. Some candidates used a serif rather than a sans-serif font.

## Question 6

A considerable number of candidates added this text was on the first slide and not on the master slide. A number of candidates omitted this step completely. There were a number of errors in data entry, particularly relating to initial capitalisation. A small number of candidates used a serif rather than a sans-serif font.

## Question 7

This stage was not completed well by a significant number of candidates. Many candidates ignored the specifications in the question paper and allowed the default settings of the software to over-ride the required elements, particularly the point sizes of each element. By failing to check these elements were as specified, some candidates lost a significant number of marks, as inconsistencies between the slides were evident when steps 8 to 21 were assessed.

## Question 8

This was generally added correctly, although there were a number of errors in initial capitalisation.

## Question 9

This stage was completed well by the majority of candidates. A small number of candidates set this subheading as a single bulleted list.

## Question 10

The presenter notes were added by most candidates, but many contained typographical errors and were not identical to those specified in the question paper.

## Question 11

The subheading was not entered correctly by a significant number of candidates. There were numerous errors in spelling, case, point size, font colour and some candidates set this text with a bullet point rather than as a subheading.

## Questions 12 and 13

These lists were not entered correctly by a significant number of candidates. There were a small number of spelling errors, a significant number of errors in case, and inconsistencies in the styles between the bulleted lists.

## Question 14

This was well done by the majority of candidates, although some failed to demonstrate that the bullets had been set to appear one at a time. A small number of candidates animated more elements on the slide than required.

## Question 15

The presenter notes were added by most candidates, but many contained typographical errors and were not identical to those specified in the question paper.

## Questions 16 and 17

The pie chart was not created successfully by a number of candidates. There were errors in the creation of the chart, in labelling the chart with the correct (and accurate) segment labels and with adding the percentage values to the segments. A significant number of candidates did not remove the legend. Some candidates failed to resize the chart to ensure that it (and the labels) were clearly visible.

## Question 18

The presenter notes were added by most candidates, but many contained typographical errors and were not identical to those specified in the question paper.

## Question 19

The subheading was not entered correctly by a significant number of candidates. There most common error was the omission of the colon at the end of the text. There were also a small number of spelling errors, errors in the font size and some candidates set this text with a bullet point rather than as a subheading.

## Question 20

This list was not entered correctly by a significant number of candidates. There was a small number of spelling errors, a significant number of errors in case, and inconsistencies in the styles between this bulleted list and those lists on slide 2.

## Question 21

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

## Question 22

The presenter notes were added by most candidates, but many contained typographical errors and were not identical to those specified in the question paper.

## Questions 23, 24 and 25

These were generally well done by the vast majority of candidates.

## Question 26

Some candidates omitted this printout from their submissions. The submissions produced did not all show that the animation features had been used. Screen shots taken during the animation do not show the examiner which elements on the slide have been animated and which have not.

## Question 27

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

## Website Authoring

## Question 28

Almost all of the candidates downloaded the files successfully.

## Question 29

Elements of this question were performed well by all candidates, for example setting styles h1 and h2 to red. Some candidates failed to set $p$ to dark blue, the most common errors were using the words 'dark blue' as the colour, or setting the hex code to \#0000FF which gives blue but not dark blue. Few candidates correctly
set the primary and default generic font types. A significant number of candidates had spelling errors in the centre alignment of h 1 and h 2 , preferring the spelling centre to center. The majority of candidates set styles h 1 to bold and italic.

## Questions 30 and 31

These were generally well done by the vast majority of candidates.

## Question 32

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 original source file rather than their amended file. 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 prevalent despite clear instructions to the candidates in the question.

## Questions 33 and 34

These were generally well done by the vast majority of candidates.

## Question 35

Many candidates answered this well, although a small number of candidates did not ensure that the whole of each image was visible when they printed the browser view of the webpage.

## Questions 36 and 37

The majority of candidates Centre aligned the top row of the table, but several candidates failed to right align the second row of the table. Many correctly set the background colour of the top row to black, but few candidates used the most efficient method for these stages.

## Questions 38 and 39

These were generally well done by the vast majority of candidates.

## Question 40

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 '_contact', 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 '_blank' using the default settings of their package. One or two candidates set the default window setting to open in the '_contact' window. A significant number of candidates did not set this to the correct file name, many using the name of the original source file, rather than the name specified.

## Question 41

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

## Question 42

The file was opened by almost all candidates. 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 43

Several candidates placed the text from previous examination sessions at the bottom of this page rather than the text specified in the question paper.

## Question 44

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

## Data Analysis

## Question 45

This was performed well by almost all candidates.

## Question 46

This step was often calculated without the inclusion of the integer function, where candidates had set the cell formatting to integer this appeared correct in the value printout, but did not allow for the correct calculation in step 47.

## Question 47

This was performed well by almost all candidates, although many had follow through errors from the failure to use an integer (or similar) function in step 46. Some candidates used functions for modulo arithmetic, which worked well for this question.

## Question 48

This question caused a significant number of problems to the candidates. A simple nested IF condition with two levels would have performed the function, but many candidates used three (or more) levels of nesting and included more complex formulae including the AND function for the Medium value. A large number of candidates included errors in the application of the formulae like ...IF(C11>5<12,... which would not work.

## Question 49

This task was not completed by a significant number of candidates, although the majority performed this well. Some failed to use the external file for the lookup.

## Question 50

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 SUMIF to a text string rather than the cells containing the text string, meaning that the formulae were not replicable.

## Questions 51 and 52

These questions caused some problems for a number of candidates. Many appeared to ignore the instructions that this referred to rows 1 and 10 ONLY and formatted all cells between these rows as well.

## Question 53

This was performed well by almost all candidates.

## Question 54

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.

## Questions 55 and 56

These were performed well by almost all candidates.

## Question 57

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 58

A small number of candidates could not filter the data from the given criteria. Some candidates produced two separate printouts, one for VCR and the length is Long and one for RSP and the length is Long.

