

# INFORMATION TECHNOLOGY

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**Paper 0418/01**

**Written**

## General comments

Candidates found this paper slightly more difficult than previous papers. The only difference between this and previous papers was the requirement for candidates to go into slightly more depth on certain topics than before. This meant that those candidates who had learnt the names of terms off by heart did not score as many marks if they did not understand what they meant. 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 understood methods of implementation but were unable to give advantages and disadvantages.

Some candidates did not perform as well as they might as they appeared to have knowledge of certain topics but appeared unable to apply this to the context of the question.

The actual mechanics of Control with the microprocessor or computer at the centre of the whole process seems to be misunderstood.

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

## Comments on specific questions

### **Question 1**

The vast majority of candidates achieved full marks, although some answered keyboard for part (e).

### **Question 2**

Many candidates gained both marks, although a number still do not appear to know what a plotter is.

### **Question 3**

Most candidates did well, though some responded with laser printer rather than dot matrix printer and a number answered magnetic stripe instead of bank cheque.

### **Question 4**

This question was well answered.

### **Question 5**

Most candidates got full marks.

### **Question 6**

Most candidates gained full marks but a surprising number of candidates inserted a Left 90 command halfway through the instructions for no apparent reason.

### **Question 7a**

Most candidates managed to gain at least two marks but vague responses such as water sensor and heat sensor were often given.

**Question 7b**

Not as well answered as expected. A surprising number of candidates gave sensors again for this part of the answer. A number gave devices such as monitors and printers.

**Question 7c**

This was poorly answered with many candidates failing to write about the computer processing aspect. A number of candidates concentrated on the role of ADC/DAC rather than computer processing. A number still think that the sensors do the controlling.

**Question 7d**

A surprising number gave an answer relating to danger yet the question was about a greenhouse. Most candidates made at least one valid point.

**Question 8**

Most candidates gained marks but cheaper and quicker were popular incorrect answers. Many candidates failed to spot the phrase 'have to' in the question.

**Question 9a**

This was well answered.

**Question 9b**

Some candidates tended to repeat their health reasons from part (a). A large number referred to viruses and hacking thereby misunderstanding the question.

**Question 10a**

A number of candidates gave one word answers when the question clearly asks them to 'describe'. On the whole it was well answered though.

**Question 10b**

Most candidates gained one mark but a surprising number thought that you cannot have a well organised paper based system.

**Question 10c**

Most candidates still fail to gain full marks on this type of question. The reasons are frequently down to two factors. They fail to use appropriate spacing. Candidates often left too little spacing for book title or allowed the same amount of spacing for each field. The other factor is when they do not fill the screen or fail to include evidence that it is an input screen such as including buttons or indication of drop down menus.

**Question 10d**

This was not well answered. Candidates still fail to understand that verification is all about comparing two sets of data.

**Question 11a**

Most candidates answered this well. A number still give basic answers such as being able to connect to the Internet.

**Question 11b**

Well answered.

**Question 11c**

Candidates seemed to understand the term but were unable to go into sufficient detail to score three marks. Many gained one or two marks.

**Question 11d**

Candidates did not answer this as well as expected. They did not seem able to put themselves in the position of the bank, frequently giving disadvantages to the customer.

**Question 11e**

This was answered well apart from when candidates answered 'hacking' without qualification.

**Question 11f**

Batch processing fails to be understood fully by many candidates. Quite a number managed to gain one mark but two or three mark answers were rare.

**Question 12**

This question was generally well answered although it was obvious that a number of candidates did not really understand the difference.

**Questions 13a to 13d**

These were well answered although there were some candidates who sorted the database on bar code.

**Question 13e**

This was surprisingly not well answered. Many candidates answered with range or length checks.

**Question 13f**

Candidates were unable to describe the processing in any detail. Most candidates only gained marks for describing the number in stock field being reduced by one every time an item is sold.

**Question 13g**

This topic does not appear to be understood. The question asked for details of a check on the 'card' not the customer account. A common response was that the 'card' was checked to see if there were sufficient funds.

**Question 13h**

Most candidates were unclear as to what processing actually takes place.

**Question 14a**

Candidates did well on this question except that a number of candidates only gave one item.

**Question 14b**

Candidates did well on this question usually gaining two of the marks. Few gained three with the cost of, and time taken for, transport being the popular answers.

**Question 15a**

Many candidates gained the mark for describing the method in (i) but not in (ii). Few candidates were able to provide advantages and disadvantages for both methods, frequently resorting to answering the opposite of their answers for (i) in (ii).

**Question 15b**

This was not as well answered as expected. The surprising feature was that candidates frequently failed to provide items of user documentation even when they had gained marks on the technical documentation.

**Question 15c**

Candidates seemed to be unable to describe how evaluation is carried out often referring to the use of test data in the testing of a system.

**Question 16**

This was extremely poorly answered with many candidates not seeming to have experienced the term expert system. A number of candidates appeared to have learnt by rote how to create such a system but were unable to say how it actually operates. The majority of candidates failed to score on this question.

# INFORMATION TECHNOLOGY

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**Paper 0418/02**  
**Practical Test A**

## **General comments**

The performance of candidates in this examination was generally good, with a large number of candidates performing well on the paper. Many of these candidates scored high marks, although a full spread of marks was experienced, and the paper performed well.

The text files were written and checked in UK English. If candidates have machines with default windows settings to US English (or other similar settings) then some of the words would be identified as spelling errors. In these cases, the spelling should not be corrected (although candidates have not been penalised if they did so).

There were a number of issues with capitalisation. Candidates must ensure that capitalisation matches that prescribed in the question paper.

## **Comments on specific questions**

### ***Communication***

This section was well completed by the majority of candidates. The candidates generally provided good evidence of the required skills, but some problems were due to the candidates'/Centres' choice of software. In these cases evidence of the BCC did not show or the name of the attached file was not visible. Additional copies were requested and these included a blind copy. Some candidates did not provide evidence of the BCC, although some realised this and provided a second screenshot to show that the blind carbon copy was there. Candidates were instructed to attach the file they had downloaded from the website. This was the rtf file. A small number of candidates incorrectly attached the csv file(s). Some candidates lost marks by misspelling the address or the subject line text or missing out the message text.

### ***Document Production***

The general standard of work in this section was very good. The most common errors were in providing correct printed margins settings. The accuracy of the text input, font, size, style and alignment for the first page was generally very well done. The page break, (which also involved a section break to allow the page layout to change to three columns) was usually correctly inserted, but was occasionally set after the wrong text, or not inserted at all.

Header and footer items were to be aligned correctly to the left and right margins and to the centre of the landscape orientated page. Some small margin of error was tolerated without penalty, but candidates were expected to appreciate the need to align these items correctly for the specified page layout.

Errors concerning text alignment (the most common not setting left aligned text for the document), font size and line spacing were sometimes seen. On occasion candidates failed to apply fonts, styles or spacing consistently to all of the paragraphs.

Spelling was sometimes not corrected. Additional changes to other text suggested by a spellchecker, e.g. Dytell to Digital, were not penalised. The bulleted list was almost always changed correctly to a lettered list. The text was not always moved to the correct place, i.e. after the first paragraph and before the table.

The table was present in the source text to be edited by the candidate. This involved deletion of a column and a row, insertion of a new column and entry of some text. This was generally well carried out, but with some errors of failure to delete a column, the difficulty of not text wrapping while displaying all the table within the column, the extending of the table into the margin or over the next column of text, or even the moving of the table to a new location.

### ***Integration within the document***

An appropriate image was usually found and inserted in the correct place in the document. Errors included an image that extended into the margin, or was not placed below the heading. Also the image was not always resized sufficiently to meet the minimum expected. Occasionally the image was not located on the correct page, or not in the correct place on the first page.

When created, the database extract and the chart were usually placed in the appropriate position within the text. The actual extraction of the summary from the database and thence the creation of the chart were difficult skills for some candidates as was the lookup of information from another file which formed part of the activity. This may have left candidates with shortage of time to get their document printed, but Centres were advised to ensure that candidates were aware of the need to get this printed even if they did not complete the integration tasks.

Credit was given for skills demonstrated if a named printout of the summary extract was included independently of the document. When present the selection was usually correct, but sometimes only showed the sums or the counts.

There were a number of errors introduced in line spacing between paragraphs and a small number of candidates failed to insert page breaks to ensure that there were no split lists or tables.

### ***Data Manipulation***

This section of the paper proved the most taxing for the candidates. There were errors found in all of the extracts which included the failure to show field labels in full, and also in the entry of the data. Failure to display a field in the first extract meant that data entry could not be checked, losing one mark for each record to be added. The majority of candidates correctly sorted the database.

Sometimes field labels and the related field data were mismatched, especially from those candidates using Access by making adjustments to the report structure. Occasionally field column headings were imported into the database, and new field headings were sometimes applied. If the field names appeared in selections of data, then candidates lost marks on the search criteria. Leaving the default "field 1", etc. led to an error in displaying all data and labels.

The average weight was generally well done and placed correctly. If the selection was incorrect, follow through was allowed. Sometimes the calculated field was not placed below the weight column in the report. Frequently the records were not sorted into descending order of Make – this may be a result of a report over riding a query that had already been sorted and this event not being noticed by the candidate. If an ID field is applied, it should not appear in the selections where specified fields only are required. The field used in the selection (colour) was sometimes printed but was not specified for display, so incurred an error mark.

### ***Administration***

A report from a Supervisor is paraphrased here. "The logon to the network did not allow access to the network printer, so floppy disks were used". These proved unreliable and had to be checked. The network did not provide software for the database section of the paper. Hence the Supervisor copies are incomplete. As the Supervisor copies were undertaken while trying to supervise the students and solve their network problems, the work is not complete."

It is not surprising that the candidate work was also not complete. While not underestimating the problems the Supervisor and candidates encountered on that day, the report serves to highlight a number of issues. One is the purpose of the Supervisor worked copy. It is essential that this is worked before the examination on the system to be used by the candidates in order to establish that they will be able to undertake the examination with the minimum of technical difficulties. Access to printers must be established as also the availability of appropriate software. Supervision of an examination cannot be carried out while undertaking another task.

# INFORMATION TECHNOLOGY

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**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. A number of candidates omitted sections from the paper. In previous years these have been from the Website Authoring section. This year candidates omitted scripts from all three sections although more attempted the Presentation Authoring section. 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 both papers last year. This year's paper was more rigorous than previous papers and gave an excellent spread of marks, showing better differentiation for the brighter candidates attaining the higher marks. A significant number of those candidates who attained the vast majority of marks on the paper introduced errors in the Presentation Authoring section; the results in this section were caused by the reliance of the software to automatically format text and not on the user. There were more errors due to typographical errors which could have been avoided with more careful proof reading and correction.

A smaller 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 e, 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, as opposed to inadvertently collecting the work of another candidate from the printer, and annotating this with their name. Printing candidate names by hand on every sheet does not fulfil this requirement. Proportionally there were fewer occurrences of this error in this session than in previous sessions.

A small number of candidates failed to print out the html code for the website authoring and a significant number of candidates failed to print the formulae for the data handling. In both cases it was impossible to award many marks to the candidates without the evidence of their structure and syntax.

Please note that it is not necessary to staple the work together. 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 made it very difficult to separate the sheets in order to view and mark all of their work.

Overall the paper performed very well.

## Comments on specific questions

### *Data Analysis*

#### **Question 1**

Almost all of the candidates loaded the file successfully.

#### **Question 2**

The majority of candidates created the correct function using either LOOKUP or VLOOKUP. There were several candidates who did not use the file as the lookup and copied the data into the spreadsheet. A significant number of candidates failed to use absolute and relative referencing for this question. This led to errors in the replication of the function.

**Question 3**

Almost all of the candidates entered the data successfully.

**Question 4**

Most of the candidates appeared to name the cells correctly.

**Question 5**

The majority of the candidates formatted these cells to % values. A small number of candidates did not set these as integers.

**Question 6**

Most candidates added a working formula into cell B2. A significant number did not use absolute and relative referencing so that the replication of the formulae gave potential errors in the second and third entries.

**Question 7**

This question was generally done extremely well.

**Question 8**

This question caused a significant number of problems. A number of candidates did not attain full marks because they did not expand the column width to show the formulae, in order to allow this to be marked. A significant number of candidates failed to nest the IF statements so that all three elements were calculated. A number of candidates had the first two sections correct, but failed to test for Code = C, and the value for this was left as a default value when the code column contained no entry. A small number of candidates set the default discount to 0 where no discount column existed in order to remove the 'False' response from the spreadsheet.

**Question 9**

The majority of responses were correct. The most common error was to reverse the formula so that instead of =G7-H7, the candidate used =H7-G7. This gave negative values in the price column.

**Question 10**

Several candidates did not format all the specified columns. Some formatted only three of the four columns. A more significant number formatted all five numeric columns.

**Question 11**

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

**Question 12**

A number of candidates did not print the formulae view.

**Question 13**

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

**Question 14**

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

**Question 15**

This question was well done by the vast majority of candidates. A few candidates removed either rows or columns but not both and there were some omissions.

**Question 16**

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 17**

A larger number of candidates could not filter the data using the two given criteria. Again, some candidates attempted to delete the rows rather than searching/filtering for the correct data.

***Website Authoring***

**Question 18**

Almost all of the candidates downloaded the files successfully.

**Questions 19 and 20**

A number of candidates did not create an external stylesheet. There was 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 attached to them so would not work in some web browsers. Other common mistakes were the use of incorrect syntax on the "font-family", and missing the units from "font-size". 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. Some candidates failed to print the stylesheet.

**Questions 21 to 24**

Many candidates created the homepage correctly, with all of the items in the correct position and the heading styles (h1 h2 h3 and h4) applied to the correct text. The table was usually created with the correct number of rows and columns. The text excerpts and image were usually correctly positioned in the table, but in some candidates printouts the image was not fully visible.

**Question 25**

Some candidates did not place the contents of the file, but opted to type the data. The contents of the file would have produced a small table which required an amendment to the border. If candidates had not placed the table there was no border to set to 3 points.

**Question 26**

The majority of candidates answered this well, although a number of candidates did not set the border to 3 points.

**Question 27**

The majority of candidates answered this well, although a number of candidates did not set the cell padding and cell spacing to the required size. 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.

**Question 28**

The table was usually created with the correct number of rows and columns.

**Question 29**

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

**Question 30**

The majority of candidates answered this well, although a number of candidates did not set the cell padding and cell spacing to the required size. 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.

**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.

**Question 33**

This was generally well done by the vast majority of candidates. A small number of candidates placed the wrong image in this cell and a small number failed to resize the image.

**Question 34**

The most common error was made by a significant number of candidates who did not open the file in a new target window called EXTERNAL, 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 EXTERNAL window. There were some 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.

**Question 35**

A small number of candidates created frames, but when printing out the web page only printed out the main frame, forgetting to print the sections for the menu choices and the title. Some candidates failed to produce the html printout as well as the copy from the browser view.

**Question 36**

A number of candidates failed to convert the J7LOGO.jpg into a smaller size and then into a more compressed format as a gif file. A large number of candidates successfully completed this task.

**Question 37**

A number of candidates failed to resize the image J7SUPP1.jpg to 250 pixels wide, some resized the width of the image but failed to maintain the aspect ratio, therefore distorting the image.

**Question 38**

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

**Question 39**

A small number of candidates failed replace the text, placing the image in a different place on the webpage, or omitting the instruction all together.

**Question 40**

This was generally well done by the majority of candidates.

**Question 41**

This was generally well done by the vast majority of candidates. Some candidates failed to produce the html printout as well as the copy from the browser view.

***Presentation Authoring***

**Question 42**

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

**Question 43**

The use of the master slide was poorly completed. A significant number of candidates placed their name at the top or centre of each page rather than placing it as specified in the master slide. Similarly the placed graphic was not always present on the master slide. The most significant omission was the automated slide numbering. A significant number of candidates attempted to add all of these elements to each slide rather than using the master slide.

**Questions 44**

This question was poorly done by many of the candidates. A significant number used PowerPoint and left the default settings in terms of point sizes and text alignment. Careful checking that these styles had been applied would have benefited a significant number of candidates.

**Question 45**

This question was well done by the majority of candidates.

**Question 46**

A number of candidates omitted the ellipsis. The heading was often correctly inserted, but few candidates applied the styles as specified in **Question 2**, particularly relating to right aligning the sub-heading.

**Question 47**

Sometimes candidates would put the notes directly onto the slide, or sometimes simply not use them at all, generally this question led to a large number of errors in data entry. There were some errors through case, e.g. Hothouse Design without capitals, and some candidates omitted the full stop from the end of the sentence.

**Question 48**

This question was well done by many candidates, although a significant number omitted the colon or the initial capitalisation.

**Question 49**

This question was well done by the majority of candidates. Some candidates omitted this instruction completely.

**Question 50**

This question was well done by the majority of candidates, although a number of candidates failed to left align the bulleted list. A number of candidates used bullet points the same size (or larger) than the subheading on slide 1.

**Question 51**

A number of candidates omitted the ellipsis, and many did not set this in subheading style.

**Question 52**

This question was well done by the majority of candidates.

**Question 53**

Several candidates animated more than the bulleted list. A number of candidates did not show any evidence of the animation.

**Question 54**

There were some data entry errors, especially typographical, capitalisation and punctuation.

**Question 55**

This question was well done by many candidates, although a small number used initial capitalisation on the second word.

**Question 56**

This question was well done by the majority of candidates, although a number of candidates failed to left align the bulleted list. A number of candidates used bullet points the same size (or larger) than the subheading on slide 1. There were inconsistencies between the size of bullet points on slide 2 and slide 3 and some inconsistencies with initial capitalisation.

**Question 57**

A number of candidates included a legend for the chart. A number failed to create the chart as specified. There were errors in the names for the axis labels. A small number of candidates failed to place this chart in the correct place on the slide.

**Question 58**

There was a small number of data entry errors, especially typographical, capitalisation and punctuation.

**Question 59**

A small number of candidates showed no evidence of this step.

**Question 60**

A number of candidates printed the slides but not the presenter notes.

**Question 61**

This question was well done by the majority of candidates.