CONTENTS

INFORMATION TECHNOLOGY

Paper 0418/01

Written Paper 1

General comments

Once again it was pleasing to see that so many candidates had done so well. Congratulations must go to the candidates and their teachers for all the hard work which must have been put in to achieve these results. There was a wide range of marks with many candidates gaining more than half marks. There were, however, areas of weakness shown by a number of candidates. These were mainly in Control and Measurement. Candidates appeared to be more familiar with screen turtle programming, however, they were unsure about the types of sensor which would be used to measure physical variables under water.

Again, there was a tendency by a number of candidates to give 'brand names' when asked to name types of software. The use of brand names often gains no credit and should be discouraged.

Comments on specific questions

Question 1

Almost all candidates achieved full marks.

Question 2

The vast majority of candidates achieved full marks, although a small number thought that a scanner was an input device.

Question 3

Most candidates did well, although a number thought that positioning the chair to look up at the screen was a correct answer.

Question 4

This question was also well answered. However, a small number of candidates appeared to think that a scanner is an item of software.

Question 5

This question was generally well answered. The vast majority of candidates circled at least one correct answer with the majority of candidates selecting both. The most common error was to select data handling.

Question 6

Most candidates scored some marks, though a number of candidates confused LEFT with RIGHT. A small number of candidates used REPEAT 7 instead of REPEAT 8.

Question 7

Many candidates achieved full marks, although a number thought that there were not 5 records.

Question 8

(a)   Many candidates mentioned sensors which would not be suitable for use under water, such as, a pressure sensor or humidity sensor. Many vague names were also given such as chemical sensor, colour sensor and toxic sensor. The popular correct answers were light, temperature and pH.

(b)   Roughly half the candidates gave answers which were incorrect failing to mention analogue or digital data.

(c)   Following on from **(b)** a large number of candidates failed to answer this correctly.

(d)   This was a better answered part of the question. There were, however, still a large number of candidates referring to 'quicker' or 'faster' with no further description.

(e)(f)   Many candidates gave brand names for their answer and often referred to Microsoft Word for **(e)**, as mentioned earlier no credit can be given for brand names.

(g)   A number of candidates interpreted this as a report produced in Microsoft Access rather than the literal meaning of the term. Very few mentioned the use of a text application (WP or DTP) to import the graph into a prepared document with a frame and text.

Question 9

This question was poorly answered. Despite the stem of the question stating 'other than virus protection software' many candidates still referred to this in one of their two responses.

Question 10

This question was answered reasonably well. Despite this many candidates wrote answers relating to the relative merits of desktop and laptop computers rather than issues of networking which related to parts **(a)** and **(b)** of the question.

Question 11

(a)   This question was very well answered.

(b)(i)   The majority of candidates attained the mark for 'copy'. Many stated alternative storage media for a second mark.

   (ii)   There were too many answers that were not specific enough giving general answers rather than the fact that information can be corrupted or deleted.

Question 12

(a)   This question was well answered. A number of candidates found more than the required 4 marks although several stated that it was not possible to get viruses from CD-ROMs.

(b)   Again a very well answered question. Many candidates who did not score well on this question only produced one marking point and suggested ways of preventing or overcoming this particular problem writing in detail about this rather than finding more marking points.

Question 13

(a)   This question was well answered with most candidates attaining the correct answer.

(b)   A large number of candidates made errors like incomplete brackets or lack of brackets e.g. =D4+E4+F4/3, which due to the order of mathematic operations gives an erroneous answer.

(c)   The most common error on this question was to find a descending order and locate that row. The majority of candidates answered this correctly.

(d)   This question was generally poorly answered with a large number of candidates failing to appreciate the need for preventing access to the data on the computer.

(e)   This part of the question was poorly attempted. Many candidates did not relate the chart to that in the question paper nor did they identify the fact that this chart was about the spreadsheet at the start of **Question 13**. Because of this there were many general answers about chart creation without really relating to the information given in the question.

(f)   This question was not well answered. A number of candidates failed to refer to CAL type applications. Many candidates referred to video and pictures, which are available without computers, rather than why computers help students to improve.

Question 14

(a)   This question was poorly answered by the majority of candidates. Many interpreted the question as adding computers to an existing laboratory rather than a change of use. Few candidates attained all 5 marks. There was much discussion about dangerous chemicals.

(b)   The majority of candidates answered this question well. However, some candidates assumed that functions such as searching, re-ordering and organising data are not possible with manual 'paper based' systems and many felt that it is impossible to lose information on a computer.

Question 15

This question was answered reasonably well. A number of candidates appeared to have 'learnt' the mark scheme but some had difficulty applying it to the context of the question. There were a number of candidates who wrote almost exclusively about computer fraud.

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Paper 0418/02
Written Paper 2
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General comments

Once again, candidates found this paper a lot more difficult than Paper 1. There was, however, a marked improvement by many Centres compared with last November. The wider scope of applications employed in questions on this paper meant that they were unable to gain marks unless they had revised thoroughly. In addition there were aspects of Systems Analysis which a number of candidates appeared to be unfamiliar with. A lower percentage of candidates achieved half marks than on Paper 1.

As in Paper 1, candidates often used brand names rather than the correct generic names as listed in the syllabus. Examples are word processing, desktop publishing, database software, modelling. Naming particular brand names is not acceptable.

Many candidates were more familiar with expert systems, although a significant number were not.

A number of candidates still offer responses such as faster, cheaper and more efficient; answers such as these must be qualified or expanded upon to gain credit.

Comments on specific questions

Question 1

Many candidates achieved full marks although some thought that dot matrix printer produced high quality printouts.

Question 2

The vast majority of candidates achieved full marks, although a small number thought that Midis were a constituent part of a video conference.

Question 3

Most candidates did well, though some gave MICR instead of Magnetic stripe reader.

Question 4

This question was well answered with many candidates gaining both marks. A small number of candidates thought that fewer doctors would be needed.

Question 5

(a)   This was reasonably well answered although a number of candidates confused 'Analysis and Design' for 'Implementation'.

(b)   Many candidates failed to do well on this question. A number of trivial answers were given such as 'better organised', as well as answers stating that it was easier to lose paper than computer records.

(c)   This was well answered although a small minority gave Make as the key field.

(d)   Many candidates appeared to guess the answers, not being sure what a range check or a drop down list is. Candidates often gave Registration number for the range check despite it being a text field. Many candidates seemed not to understand that (ii) required the two fields which were *most* suited.

Question 6

This was very well answered.

Question 7

Many candidates gave an overview of a central heating system as opposed to the computer processing involved. Many candidates incorrectly gave heat sensor or thermometer instead of temperature sensor.

Question 8

Most candidates answered this question well although a small number confused batch processing with on-line processing.

Question 9

(a)   Candidates sometimes failed to note the significance of the mention of financial modelling in the question and gave answers such as sorting and searching which are equally applicable to other software packages.

(b)   This was not as well answered as had been expected. Many candidates were unable to be specific and gave vague answers.

Question 10

(a)   Most candidates gave correct answers.

(b)   A number of candidates were unable to suggest a suitable check. The majority of candidates gave either check digit or existency check but failed to expand on either.

(c)   This was well answered by a number of candidates. Some candidates, however, failed to refer to the information given in the question and were unable to gain many marks.

Question 11

(a)   Many candidates did not appear to be familiar with the processing involved in the transmission of an email and so failed to gain marks. A number of candidates, however, answered this question well.

(b)   Many candidates answered this well, though a number offered vague answers such as quicker or cheaper without expanding on them.

Question 12

(a) Candidates did well on this question.

(b) Many candidates did well on this question, but few gained all three marks.

(c) Most candidates gave a correct answer.

(d) The vast majority of candidates gained marks on this question but rarely all four marks. A number of candidates tended to re-word the question giving answers saying that you do not have to travel to the bank, but failing to say why this would be an advantage or disadvantage. A number of candidates gave hacking as a disadvantage without describing why.

Question 13

Candidates showed an improved knowledge of expert systems but a sizeable number of candidates appeared to have no knowledge of them.

(a) A number of candidates gave vague answers such as medicine.

(b) Some candidates answered this well but too many candidates failed to realise the need for referring to expert systems and gave descriptions of general systems analysis.

Question 14

(a) This was generally reasonably well answered although a number of candidates thought that the robots were actually being controlled by humans throughout the process.

(b) This tended to be well answered, although once again cheaper or quicker were often given as answers without qualification.

Question 15

(a) This question was generally well answered, although a small number of candidates did not appear to understand the question.

(b) A number of candidates did not read the question properly and suggested ways of securing data, rather than suggesting rules for protecting data such, for example, that a government-produced data protection act might contain.

(c) Again, a sizeable number of candidates often failed to gain three marks as they made just one point, usually about data structure, and gave three variations of this. However, a large number did gain more than one mark by including input and output formats as well.

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Paper 0418/03
Practical Test
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General comments

The general performance of candidates in this examination was good, with many scoring high marks, although a full spread of marks was experienced, and the paper performed well.

Many candidates who performed very well on the more complex questions on the paper often made simple errors, like failing to check the accuracy of the data entered into the document or the accuracy of new records added to the database. There appeared to be areas of the document production where candidates omitted demonstrating skills on one printout, like aligning the text or line spacing, when they had performed this function on the other printout.

Candidates appeared to find the data handling section of the paper more challenging than the document production, within this section there were many candidates who did not check their printouts for minor errors like misplaced named and truncated (clipped) headings.

Greater attention to detail would have benefited many of the candidates sitting this paper.

Comments on specific questions

Questions 1-4

This section of the paper was generally well done with the majority of the candidates answering the questions correctly. Uncorrected typing errors in the address were evident in a small number of scripts. The most common error was the failure to attach the required file to the e-mail message. Candidates must ensure that the filename of the attachment is correct.

Question 6

The majority of candidates in some Centres did not set the page size to A4. These candidates need to be aware that having A4 paper in the printer does not lead to the document in A4 format with the correct margin settings and this also needs to be set up using the page setup area of the specific software used. If the settings within the operating system (windows) environment or within the applications package (office) setup have been set to a different paper size (like Letter), then these default settings must be over-ridden in the page setup area of the applications package in order to ensure that the page size/margins appear as specified.

Question 7

A significant number of candidates failed to set the page orientation to landscape. Many of these candidates also failed to change the page orientation in the other areas of the paper.

Question 9

This question seemed to cause many problems for the candidates. Several candidates left the margin settings to the default settings of the machines within the Centre, and many may have had erroneous settings because of the default page sizes (see notes on **Question 6** above). Even making allowances for paper feed errors, a significant number of candidates did not get this question correct.

Question 11

A number of candidates failed to left align the text in this question.

Question 13

A significant number of candidates failed to enter the heading correctly. There were many variations of both spelling and a lack of spacing between the words.

Questions 14

A small number of candidates completed some of the elements of this question, but omitted others.

Question 21

There were a number of errors in this question. Many candidates had added the data, but failed to check its accuracy before progressing to the next question. Particular problems were with the spelling of the names of the countries.

Question 23

There were a number of errors in this question. On the whole, the search was completed accurately. However, many candidates failed to ensure that the contents of all the fields were visible. There were a number of errors in the sorting, where candidates had used a spreadsheet package instead of a database package, a significant number of candidates had failed to maintain the data integrity by highlighting a single column (rather than all the data) prior to performing the sort.

Question 25

There were a number of errors in this question. A number of candidates failed to produce the correct search and many candidates either omitted or failed to complete the sorting of this data on the Density field. Some candidates performed the sort into ascending instead of descending order.

Many candidates failed to use the correct calculated control (or calculated cell for those using Excel) to work out the average Energy value. Many used the SUM function rather than calculating the maximum value.

A number of candidates failed to place their name in the specified place on the page, which in Access meant some simple manipulation in the design view of the report.

Question 27

There were a number of errors in this question. A number of candidates failed to produce the correct search. Some candidates had too many fields visible when they imported this report into the final document in **Question 40**.

Question 30

The vast majority of candidates removed the page break, a small number failed to do so.

Question 34

Many candidates did not apply the 1.5 line spacing to all the paragraphs of the document.

Question 35

Many candidates did not fully justify all the paragraphs of the document.

Question 36

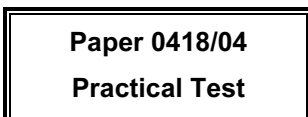Many candidates did not set the body text size to 10 points for all the paragraphs of the document.

Question 37

A small number of candidates introduced data entry errors within the table.

Questions 38 and 39

There were a number of candidates who produced images that were unrelated to 'construction or building'. There were also a large number of images that were not placed within the margins as shown in the diagram on the question paper.

Several candidates failed to resize the image as required by the question. Many images were placed but not enlarged (maintaining their aspect ratio) to fill approximately a quarter of the page, despite being given a diagram on the question paper to help them.

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    Paper 0418/04
    Practical Test
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General comments

Some candidates found the data analysis section difficult and many more found the website authoring section difficult. There were a large variety of packages used for the Website authoring section. Some candidates failed to printout the html code for the website authoring, or 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.

Despite this the paper gave a full range of marks across all Centres.

Comments on specific questions

Data analysis

Question 1

Some candidates failed to create a data model like that specified on the question paper. Positioning of the tables and correct data entry were important elements that were sometimes omitted by candidates. There were a considerable number of data entry errors which could have been avoided if candidates had carefully checked their work.

Question 2

Some candidates failed to name the cells as specified. Some candidates typed labels for 'five' and 'ten' into other cells rather than inserting a name.

Question 3

This question led to a considerable number of different errors from the candidates, using a variety of different (and often incorrect) variations of the IF statement. The most common errors were in confusing the less than and greater than symbols and in failing to use the named cells. Some candidates used absolute cell referencing instead and, some just used relative cell referencing for the 5% and 10% leading to errors in replication in **Question 8**.

Question 4

This step was well done by the vast majority of candidates, although there were some very unusual applications of the 'sum' function.

Question 5

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

Question 6

This question was the one most candidates failed to complete correctly within this section of the paper. Many used the COUNT function rather than the COUNTIF function and consequently either obtained no total or failed to use the Equipment column as specified on the question paper.

Questions 7-9

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

Question 10

A significant number of candidates did not produce the required formulae printouts. Some of those who did so failed to enlarge the column widths so that all of the formulae were visible.

Question 11

Data entry contained errors in a significant number of cases, candidates did not proof read their work or correct the spelling/typing errors that they had introduced during the copy typing.

Question 13

A considerable number of candidates could not filter the data from the given criteria.

Website authoring

Question 2

The printouts of the stylesheet were generally correct, yet most candidates failed to ensure its effective application on the webpage. Several candidates did not save this stylesheet in .css format. Many of the better stylesheets still contained errors in the text alignments for one or more of the specified styles.

Question 3

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

Question 4

This question was generally well answered. Quite a few candidates created frames, which is a valid way of answering the question. When printing out the html, many of the candidates only printed out the main frame, forgetting to print the sections for the menu choices and the title.

Questions 5-6

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

Question 7

A very large number of candidates did not open the file in a new target window called EXTERNAL, many used the default settings of their web authoring package (for example "_blank" in FrontPage) and had not edited this in the html code. There were a significant number of candidates who appeared confused between having an external target window and setting the title of the webpage to be external. Some candidates erroneously referred the hyperlink to an unknown page called "EXTERNAL.HTM".

Questions 8-10

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

Question 11

The majority of candidates failed to ensure the effective application of the styles on the webpage. It is always worth candidates referring back to the html code generated by 'wysiwyg' web authoring packages and checking that the package has not changed the style settings. In some cases font sizes were set in the stylesheet and then overridden by the web authoring package. Should this occur, candidates are expected to be able to edit the underlying html code, in order to ensure that the requirements of the question paper have been fulfilled.

Question 12

A significant number of candidates failed to print a fully visible image.

Question 13

A significant number of candidates failed to print the html code for their webpages.

Question 14

A significant number of candidates failed to convert the SWAA4ICO.jpg into a smaller size (35 pixels wide) and then into a more compressed format as a gif file.

Question 15

Many candidates failed to reduce the file SWAA4PEN.jpg to 300 pixels wide, whilst maintaining the aspect ratio. Some candidates also misplaced this image.

Question 16

A number of candidates did not print out any html code with the browser views of their webpages.

Presentation authoring

Question 1

The use of the master slide was poorly completed. Many candidates manually placed their name and the date on each page rather than placing it as specified in the master slide. Similarly the clipart image was not always present. This was the most consistently found error within this section of the paper.

Questions 1 and 2

The colour schemes chosen for this paper allowed for good distinction when printed in black and white. However, some candidates used colour selections which made marking more difficult. Candidates must ensure that if the Centre is not using a black and white printer the colours selected give suitable contrast.

Questions 3-7

A significant number of candidates failed to enter the heading, subheading, bulleted list and presenter notes without error. There was a lack of careful checking that the typing, alignment and case used were as specified on the question paper.

Question 8

The production and manipulation of the chart was not well done by many candidates. A small number of candidates did not produce a vertical bar chart, preferring to insert another style of chart or a table of results. A significant number included a legend despite a clear instruction in the paper saying 'Do not display a legend'. Axis labels were also omitted by a significant number of candidates.

Question 9

A number of candidates added a vertical line (as found on last year's paper) rather than the line between the heading and the rest of the slide content. Many other candidates did not use a thick line.

Question 10

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

Questions 11-13

A significant number of candidates failed to enter the heading, bulleted list and presenter notes without error. There was a lack of careful checking that the typing, alignment, spacing and case used were as specified on the question paper.

Question 14

This step was well done by many candidates, although the clipart was sometimes misplaced on slide 3. There were several graphics which bore no relation to the requirements of the question.

Question 15

A significant number of candidates failed to enter the presenter notes without error. There was a lack of careful checking that the typing, spacing and case used was as specified on the question paper.

Questions 16-18

These steps were well done by the vast majority of candidates, although some Centres did not complete the front of the ARF for any of their candidates.