INFORMATION TECHNOLOGY

Paper 0418/01
Written

General comments

Candidates found this paper of the same difficulty as previous papers. A number of candidates had learnt answers to previous questions off by heart but did not score many marks when faced with a different question on a similar topic. This was particularly the case regarding expert systems. The wide scope of applications employed in questions on this paper meant that candidates were unable to gain high marks unless they understood the subject thoroughly. In addition there were aspects of Systems Analysis which a number of candidates appeared to be unfamiliar with. Often candidates failed to understand what is involved in designing a new system. Again, it appeared that some candidates had learnt their answers in rote fashion.

One major cause for concern is the lack of understanding of computer processing. Many candidates seem unsure of how computers actually process data either on-line or batch processing.

Comments on specific questions

Question 1

The vast majority of candidates achieved full marks, although some answered processor for **part (c)**.

Question 2

The majority of candidates gained both marks, although some candidates thought that a temperature sensor could store data.

Question 3

This question was generally answered well.

Question 4

Parts a and **b** were very well answered but many candidates struggled with the bus network.

Question 5

Most candidates got full marks but some inserted a 'left' at some point in the code for no apparent reason.

Question 6

Many candidates gained full marks but a number of candidates gave incorrect answers for both 1 and 2.

Question 7

Many candidates gained only 2 marks being unable to distinguish correctly between optical and magnetic media. A some candidates thought that dot matrix printers produce high quality output.

Question 8a

This question exposed the shortcomings of those candidates who learn answers from previous question papers off by heart. Many candidates referred to elements of data structure and user interfaces despite the question telling them that these had already been designed.

Question 8b

Candidates often failed to spot the fact that they had to design an output format. Many also thought that it was a patient's details rather than a member of staff. The space allocation of fields was often disproportionate.

Question 8c

This was often well answered but too many candidates answered a question which was not there. They frequently gave answers relating to methods of implementation.

Question 8d

Again, those candidates who had learned answers off by heart were quite often unable to gain many marks. They tended to describe the processing of data by an expert system rather than how one is created. Many other candidates gave answers referring to systems analysis in general rather than specifically expert systems.

Question 8e

Most candidates gained marks for this question.

Question 8f

Most candidates answered this question well.

Question 8g

Most candidates gained marks for this question but too many gave the definition of a modem showing a clear misunderstanding of the question.

Question 8h

This question appeared to differentiate well between candidates. The number of candidates who gained 3, 2, 1 or 0 marks seemed to be equal in proportion. A frequent misconception was that computers would replace nurses. Another was that computers could monitor at night but nurses could not.

Question 9a, 9b, 9c and 9d

These were very well answered.

Question 9e

This proved to be a stumbling block for a number of candidates. Candidates seemed to be quite confused over their answers with several providing answers which would simply not work.

Question 9f

This seemed to be a question where the candidate either knew the answer or did not understand the question. Very few candidates achieved only one mark. Most got 0 or 2. A surprising number gave Microsoft Office products with answers such as Publisher, Word, Access and Excel.

Question 10a

Most candidates gained both marks for (i) but far fewer gained two marks for (ii).

Question 10b

A number of candidates had revised for 'advantages' and gave these rather than reading the question.

Question 11

Many candidates did not seem to understand what an Intranet is. A number picked up on one point such as security and gave three answers related to this and consequently were unable to gain more than one mark.

Question 12a

This question was generally well answered although some candidates gave examples which were either outside the home or not labour-saving.

Question 12b

This question was generally not very well answered. A number of candidates concentrated on one device and then gave the benefits of using that device.

Question 13

Most candidates gained all three marks.

Question 14

Candidates answered this question quite well except that the processing part of many answers was weak.

Question 15a

This was not well answered. Many candidates gave answers which were too vague, referring to introducing viruses or just mentioning hacking.

Question 15b

This was well answered although some candidates mentioned encryption which, does not control access to the computer system.

Question 15c

Some candidates did not understand the question. They wrote about what encryption is without necessarily describing how it would help protect the data.

Question 15d

This question was well answered although there were some candidates who gave brand names.

Question 15e

This question produced some good answers but additionally some weak answers relating to the advantages of having a web site in general, without mentioning the features.

Question 15f

Candidates were generally able to provide at least one correct answer.

Question 15g

This question was not well answered with many candidates failing to note that the question related to the use of the Internet in lessons and not out of school.

Question 16a

Most answers were too general and did not give specific stages in the computer processing which would occur in the example given, but instead just gave generalised descriptions.

Question 16b

Candidates did well on this question usually gaining at least one mark. Many gained two marks for describing batch processing but were unable to write about why it would not be a sensible method for booking tickets.

INFORMATION TECHNOLOGY

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Paper 0418/02

Practical Test A
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General comments

The performance of candidates in this examination was generally good, however some Examiners reported that there were more candidates who did not complete the paper than in the June 2007 session. A large number of candidates performed well on the paper nevertheless. Many of these candidates scored high marks, although a full spread of marks was produced, and the paper performed well. The paper was similar in difficulty and skills tested to the June 2007 paper and candidates who had had the chance to use that paper as a practice examination would have been familiar with the problems posed.

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 sections

Communication

This section was well completed by the majority of candidates. The candidates generally provided good evidence of the required skills, but some problems arose from the candidates'/Centres' choice of software. In these cases, evidence of the BCC or the name of the attached file were not visible. Some candidates did not provide evidence of the BCC, although some realised this omission and provided a second screenshot to show that it 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 mis-spelling the address, using the wrong address e.g. ucles.org.uk, or mis-typing the subject line text or missing out the message text.

Some Centres reported that candidates waited a long time for an e-mail response. Candidates should not be disadvantaged due to time lost in waiting for a reply. If Internet delays are experienced, Centres are advised to have an alternative plan for delivery of the source files to the candidates and should consult CIE Centre support documentation if in need of advice. It is intended that candidates should be comfortable and confident of the software, hardware and procedures to follow in case of communication difficulties.

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 for changed page layout to two 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. 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 being not setting correct and consistent alignment for the document text), font size and line spacing errors were sometimes seen. On occasion candidates failed to apply fonts, styles or spacing consistently to all of the paragraphs. The body text was to be set in two columns with a line between. This was generally well controlled but, for some, the printing of a line drawn between columns was obviously new.

Spelling was sometimes not corrected. The bulleted list was almost always changed correctly to a numbered 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 in deleting a column, not text wrapping while displaying all the table within the column, extending the table into the margin or over the next column of text, and the moving of the table to a new location.

If candidates printed with tracking notes attached, then Examiners made every effort to award as much layout evidence as possible crediting, for example, page size, margins, and text size from tracking notes where available.

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 not placed at the top of the column on the correct page.

When created, the database summary extract and the chart were usually placed in the specified 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. The chart was sometimes based on the summary showing the value of sales and not the number of sales. Difficulties with the extraction of data, lookup and creation of the chart 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 document 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 or column breaks to ensure that there were no split lists or tables. Sometimes the text was incorrectly sequenced in the document due to unidentified layout problems.

Data Manipulation

This section of the paper proved the most taxing for the candidates. Candidates were expected to show the field structure and datatypes for their database, and to provide this evidence by way of a screen shot. Software that enables the data structures to be defined and shown is required to achieve these marks. Some candidates used database software only to show the import structure, then appeared to produce their reports in another piece of software. There were errors found in the reports including the failure to show field labels or contents in full, and also in the accuracy of entry of the data. Failure to display a specified field in the first report meant that data entry could not be checked, losing one mark for each record to be added. The majority of candidates who displayed the calculated cost filed also correctly sorted the report on that field.

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.

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.

The second report required wildcard searches and sorting on two fields. The search criteria were sometimes not accurately applied, and the sort, while often correct, was sometimes only applied to one field or in the wrong order.

Overall

Some candidates only submitted the document, and others only the database reports. A few submitted very little printed evidence at all. This may have been due to several factors including shortage of time to complete the paper, lack of time to complete printing or other influences of software or hardware problems. For a few candidates it may have been their lack of preparedness in the necessary skills to tackle the paper.

INFORMATION TECHNOLOGY

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Paper 0418/03
Practical Test B
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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 of the paper, in previous years these have been focused on the Website Authoring section, this year candidates omitted scripts from all three sections. 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 paper gave an excellent spread of marks. A significant number of those candidates who attained the vast majority of marks on the paper introduced errors in the Presentation Authoring section; this was often caused by a reliance on the software to automatically format text. There were a large number of typographical errors, which 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, as opposed to collecting the work of another candidate from the printer, and annotating this with their name. Proportionally there were less occurrences of this error in this session than in previous sessions.

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. 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.

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

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

Many of the candidates entered the data successfully, although a number of candidates rounded these values before entering them into the cells.

Question 4

Most of the candidates appeared to name the cells correctly, although a small number of candidates used the correct names for the wrong cells..

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 H2. 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 vast majority of candidates nested the IF statements in reverse order, if they were nested with IF(E7>=10… as the first statement, then the wrong answer was obtained. Some candidates set the default discount to 0 where the number of Sales was less than 10, but a significant number failed to do this.

Question 9

The majority of responses were correct.

Question 10

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

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

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. A small number of candidates printed all of the records and highlighted the 'Maxell' records.

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. Credit was given for follow through marks from the incorrect order of the nested IF statements.

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 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 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.

Question 21

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.

Question 22

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

Question 23

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 h4.

Question 24

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

Question 25

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

Question 26

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

Question 27

The majority of candidates failed to answer all parts of this question. The cell padding was generally set correctly but few candidates set 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.

Question 28

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

Question 29

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 30

The majority of candidates answered this well, although a number of candidates imported the image but failed to set the image height to 200 pixels whilst maintaining the aspect ratio.

Question 31

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 final instruction completely.

Question 32

The majority of candidates failed to answer all parts of this question. The cell padding was generally set correctly but few candidates set the required cell spacing. A number of candidates failed to set the width of this table to 600 pixels.

Question 33

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

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 a 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.

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 N7ICON.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 N7MEDIA.jpg to 300 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, although some candidates deleted the text 'Last updated by'.

Question 39

A small number of candidates failed to replace the text, placed the image in a different place on the webpage, or omitted the instruction all together. Several candidates incorrectly made the image link to an absolute reference on the hard drive of the local machine or to a local network drive.

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 small number of candidates placed their name at the top right on each page rather than placing it as specified in the master slide. Similarly the placed graphic were not always present on the master slide. The most significant error was the placing of automated slide numbering, which was frequently left on the right in the default setting for the package used. 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, although several candidates failed to use the same initial capitalisation as required by the paper.

Question 46

The subheading was often correctly inserted, but few candidates applied the styles as specified in question 2, particularly relating to left aligning the subheading.

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 a number of errors through case, e.g.. Hothouse Design or Sales 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 used incorrect initial capitalisation.

Question 49

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

Question 50

A number of candidates omitted the colon, and many did not set this in subheading style. Few candidates checked that the case of this was correct, leaving the default settings (amended by the package). Many candidates could have gained this mark if they had proofread their work before printing.

Question 51

This question was well done by the majority of candidates. Some candidates used a different style from the first bulleted list on this slide.

Question 52

This question was well done by the majority of candidates.

Question 53

The vertical line was omitted by a number of candidates. Several added a horizontal line and some candidates used boxes or other shapes. A number of candidates had ignored the requirement for the line to be 5 points thick.

Question 54

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

Question 55

This question was well done by many candidates, although there were a number of capitalisation, spelling and punctuation errors.

Question 56

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

Question 57

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 a number of inconsistencies between the size of bullet points on slide 2 and slide 3 and some inconsistencies with initial capitalisation.

Question 58

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

Question 59

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

Question 60

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

Question 61

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

Question 62

This question was generally well attempted. A small number of candidates printed the slides but did not allow space for the audience to make notes on the page. A number of candidates omitted this question.

Question 63

A significant number of candidates did not show evidence of the animation set on slide 2. Screen shots taken during the build did not constitute evidence of this as it was not possible to see that only the bullets (and not the subheading) had been animated. If timing is used for the bullets, there must be evidence that they are timed individually and not set to appear together; using the time line in some packages would fulfil this criterion.

Question 64

This question was well done by the majority of candidates.