

International General Certificate of Secondary Education

MARK SCHEME for the November 2003 question papers

0418 INFORMATION TECHNOLOGY				
0418/01	Paper 1 (Written), maximum raw mark 80			
0418/02	Paper 2 (Written), maximum raw mark 80			
0418/03	Paper 3 (Practical), maximum raw mark 70			
0418/04	Paper 4 (Practical), maximum raw mark 72			

These mark schemes are published as an aid to teachers and students, to indicate the requirements of the examination. They show the basis on which Examiners were initially instructed to award marks. They do not indicate the details of the discussions that took place at an Examiners' meeting before marking began. Any substantial changes to the mark scheme that arose from these discussions will be recorded in the published *Report on the Examination*.

All Examiners are instructed that alternative correct answers and unexpected approaches in candidates' scripts must be given marks that fairly reflect the relevant knowledge and skills demonstrated.

Mark schemes must be read in conjunction with the question papers and the Report on the Examination.

• CIE will not enter into discussions or correspondence in connection with these mark schemes.

CIE is publishing the mark schemes for the November 2003 question papers for most IGCSE and GCE Advanced Level syllabuses.

Grade thresholds taken for Syllabus 0418 (Information Technology) in the November 2003 examination.

	maximum	n	minimum mark required for grade:			
	mark available	Α	С	Е	F	
Component 1	80	53	40	25	21	
Component 2	80	50	34	21	16	
Component 3	70	65	55	40	34	
Component 4	72	64	46	25	19	

The threshold (minimum mark) for B is set halfway between those for Grades A and C. The threshold (minimum mark) for D is set halfway between those for Grades C and E. The threshold (minimum mark) for G is set as many marks below the F threshold as the E threshold is above it.

Grade A* does not exist at the level of an individual component.



NOVEMBER 2003

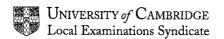
INTERNATIONAL GCSE

MARK SCHEME

MAXIMUM MARK: 80

SYLLABUS/COMPONENT: 0418/01

INFORMATION TECHNOLOGY Paper 1 (Written)



Page 1 of 6

MARK SCHEME SHEET

Subject/Paper No: 0418/1

Month: November

Question Number	Answers	į	Part Mark
1	A Monitor B CD ROM Drive C Speaker D Mouse E Keyboard	1 1 1 1 1	
2	pupil record credit card	1	
3	Presentation graphicsrecording data in a	science experiment	
	Word processor preparing a talk to s	show how a computer works	
	Spreadsheet writing letters to par	rents	
	Database keeping school tuck	shop accounts	
	Desk Top Publishing storing pupil record	s	
	Measuring program producing the school	ol magazine 5	5
4	Two from: Cannot be moved easily from computer to computer. Can be written to and read from without the use of special ed Has much faster access time. Has much faster transfer rate Can store much more data	equipment.	2
5	4 marks, minus1 for each mistake		
	FORWARD 20 RIGHT 90 FORWARD 40 RIGHT 90 RIGHT 90 FORWARD 20 RIGHT 90 FORWARD 20 FORWARD 20 PENUP))	4
6	TRUE FALSE FALSE FALSE		

Page 2 of 6

MARK SCHEME SHEET

Subject/Paper No: 0418/1

Month: November

Question Number	Answers	Part Mark
7	Two from ability to control cursor, select, scroll, menu.	2
8	Two from Don't use floppy discs from unknown sources. Use a virus checker/killer program. Don't download files from the internet. Don't load attachments to e-mails from unknown/doubtful sources	2
9	Two pieces of software from Data logging software Data handling DTP Spreadsheet	
	Word processing	2
	Two uses from: Taking physiological readings during exercise. Storing data logging readings. Storing pupil records. Producing graphs from data-logging data. Producing posters for department notice board/team sheets. Calculating pupil marks.	
	Send letters home about sports days, fixtures etc. Use must be appropriate to software.	2
40.		1
10a)	i) Exam number. ii) It is unique for each candidate.	1
b)	Gender.	
c)	Age changes every year and so file will need to be continually updated.	1
d)	Two from: Use passwords Encrypt data Restricting use of data to certain computers	2
11	One from: Not restricted to using it in one room/Can use it for data logging outdoors.	1
	One from: Not as easy as using mouse/ Screen display not as clear/ Battery limits length of use/ easily broken/ easily stolen	1

Page 3 of 6

MARK SCHEME SHEET

Subject/Paper No: 0418/1

Month: November

Question Number	Answers		Part Mark
12	Three from:		
	Database to store data/print graphs.		
	Spreadsheet to store data/print graphs.		
	Data logging software to convert data.		
	Temperature sensors to read data.		
	Printer/plotter to print graphs.		3
	ADC to convert analogue signals to digital.		
	7/150 to convert analogue digitals to algitals		
13	a) when a new student joins the school		1
. •	b) when a pupil leaves the school		1
	c) when a pupil changes address/phone number/ parents/form/class/house/		-
	when incorrect data has to be corrected.		1
	Which shoot out data has to be confeded.		'
14a)	Two from:		
;	(Microwave) oven.		
	Dishwasher/Washing machine.	•	
	Television.		
	VCR.		
	Iron.		
	Hoover.		
	Air conditioning system/Central Heating system.		
	Stereo system.		
	Otereo system.		
b)	two from:		2
,	more leisure/free time.		
	Become more lazy.		
	Can go out more/no need to stay in as much to do housework.		
			2
15	Three from:		
	Open/create document(s)		
	One containing information which will be repeated in each letter.		1
	One containing information which will be repeated for each envelope.		
	Open/create a database		
	which contains names and addresses,		
	which contains form tutor, form		
	In the main document, insert placeholders for variables		
	Merge data from the database into the main document.		
	Print letters and envelopes		3
	Third letters and envelopes		
16a)	One from:		
,	To convert digital computer signals to phone signals.		
	To convert phone signals to digital computer signals.		1
	The service of the se		i



Page 4 of 6

MARK SCHEME SHEET

Subject/Paper No: 0418/1

Month: November

Question Number	Answers	Part Mark
16b	two from: Easy to find information. Can do their banking on-line. Can do their shopping on line. Lonely people can join chat rooms/bulletin boards. Access to a huge database of information. Can gain up to the minute news about events currently happening. An advantage of using e-mail compared with letter post	2
17a)	One from: Backache RSI Eyestrain Headaches	
	One from: Get straight back chairs/Sit with straight back/don't slouch/Do finger exercises periodically. Get anti-glare screens/look away from screen periodically. Have eyesight tested/get glasses. Take regular breaks.	2
b)	Two from: Prints more copies per minute. WYSIWYG – paper in inkjet is more likely to misalign. Paper tray needs refilling less often. Cartridges need changing less often. Quieter than inkjet.	2
18	Any order Three from: Create database of exam results using database/spreadsheet. Produce reports using database software. Import data into spreadsheet software/graphics package Produce graphs using database/spreadsheet/graphics software. Create web page using word processor/DTP/web authoring package. Create links/import data using word processor/DTP/web authoring package. Upload web page.	3

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MARK SCHEME SHEET

Question	aper No: 0418/1 Month: November Year: 2003	Part
Number	Answers	Mark
19a)	Two from: Compatability with existing system. Speed of processing. Amount of IAS. Amount of hard disc space. Presence of a network card. reliability	2
b)	One problem from: Will cause reduction in speed. Will fill up hard disc - no room to save work. One solution from: Buy extra internal memory for server. Buy another hard disc for server. Buy another server to act as slave.	
c)	One from: Printer. Scanner. One from: Connected to a computer locally and driver installed on computer, configured to be shared. If network card present, connect directly to a network point and driver installed on server, configured to be shared.	
20	Advantages: Curriculum: Can prepare worksheets and put on intranet. Can assess pupil's work saved on network. Are aware of what is available on pupil's work area. Can practice using software. Admin: Can print out class lists. Can record assessments. Can read pupil timetables. Can read staff timetables. Can look up attendance records. Can access pupil records	2
	4 marks maximum for each up to total of 5. (disadvantages can be any negative wording of the above providing the positive hasn't already been given)	5

Page 6 of 6

MARK SCHEME SHEET

	aper No: 0418/1 Month: November	Year: 2003	
Question Number	Answers		Part Mark
21	Must be at least one from each but four from: Librarian: Fewer mistakes in entering data. Easier to see who has got what books out. Easier to print out overdue book lists. Easier to check if a book is in or out. Automatic calculation of fines. Student: Easier to see if library has a certain book. Easier to search for books on certain topics.		
	Easier to search for books by particular author Easier to check what books you have got out.		4
22	Four from: Spreadsheet file will be saved in suitable format. Template/frames created in DTP package Spreadsheet file imported in to DTP package Pictures imported into DTP package Text typed in and formatted		
	Text typed in and formatted. Headings formatted.		4



NOVEMBER 2003

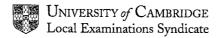
INTERNATIONAL GCSE

MARK SCHEME

MAXIMUM MARK: 80

SYLLABUS/COMPONENT: 0418/02

INFORMATION TECHNOLOGY Paper 2 (Written)



Page 1 of 5

MARK SCHEME SHEET

Subject/Paper No: 0418/2

Month: November

Answers	Part Mark
Scanner Touchpad	1
magnetic strip on a credit card customer database	1
modem ISDN link	1
Analysis Implementation Password A virus	1 1 1
People don't have to leave their house to do the shopping. People can do their shopping at any time of day.	1
file structure Screen layouts	1
Scanner Digital camera	1
Video reference number	1
FALSE TRUE TRUE FALSE	1 1 1
Three from: Draw lines (of different types) Draw lines of different thicknesses Insert text Library of shapes Different views available/3D option Rotate shapes/lines Use of scales Copy shapes/lines Enlarge shapes/lines Specify co-ordinates/measurements Shading/colouring Insert image	3
	Scanner Touchpad magnetic strip on a credit card customer database modem ISDN link Analysis Implementation Password A virus People don't have to leave their house to do the shopping. People can do their shopping at any time of day. file structure Screen layouts Scanner Digital camera Video reference number FALSE TRUE TRUE FALSE Three from: Draw lines (of different types) Draw ilnes of different thicknesses Insert text Library of shapes Different views available/3D option Rotate shapes/lines Use of scales Copy shapes/lines Enlarge shapes/lines Enlarge shapes/lines Enlarge shapes/lines Specify co-ordinates/measurements Shading/colouring

Page 2 of 5

MARK SCHEME SHEET

Subject/Paper No: 0418/2

Month: November

Question Number	Answers	Part Mark
9	OMR	1
	RAM	1
	Word processing	1
10	Booking a flight at a travel agent.	1
	Withdrawing money from a cash point.	1
11a)	Bar Code Reader/Keyboard	1
b)	Check digit/length check/existency check/range check/invalid character check	1
c)	User name/membership number/security code/id	
	Password	2
12a)	Must include space(s) after name in proportion to length of likely response or an appropriate example.	
	Membership number.	1
	Personal data (name, address, post code/zip, box number, phone no. etc.) 2 marks for 4	
	items, 1 for 3 items else 0 (first name and second name only counts as one item, address1, address2, address3 etc.	2
	together only count as one item)	
	Method of payment	1
	Information fills the page AND is clearly a screen input form.	1
b)	Visually checking data comparing to original	1
-	Entering data twice and comparing	1
	Can be descriptions of two versions of double entry.	
c)	Two from:	
	Length check	
	Range check Invalid character check	
	Existency check (lack of) / Uniqueness	2
d)	(Data can be seen and) personal details spread about. Data can be changed.	
	Data can be deleted.	3
e)	Descriptions of three from	
	Abnormal data	
	Normal data	
	Extreme data	2
<u> </u>	Erroneous data	3



Page 3 of 5

MARK SCHEME SHEET

Subject/Paper No: 0418/2

Month: November

Question Number	Answers	Part Mark
13	Three applications from Medical diagnosis, Car fault diagnosis, Mineral exploration, chess games, tax advice Three inputs and outputs from: Medical diagnosis: Inputs - medical symptoms, Output - diagnosis Car fault diagnosis: Inputs - car problem symptoms, output - diagnosis Mineral exploration: Inputs - depth of digging, type of rock etc., output - probability of finding specific minerals chess games: Inputs - chess moves, Output - resulting chess move tax advice Inputs - earnings, family details, job details, Output - advice on working patterns, eligibility for allowances	3
14a)	Two from: Bank sort code Account number Expiry date Start date/issue number	2
b)	Two from: Existency/validity Not been stolen Expiry date still valid Sufficient funds Pattern of use	2
c)	Two from: Authorisation to continue with transaction Computer reads balance matching the account number Deducts payment from balance Credits supermarket account with payment Prints itemised bill.	2
15	Two descriptions from: Direct changeover - scrap the old system and start using the new system immediately. Parallel running - running both the old system and the new system until the new system has 'proved itself'. Pilot - implementing the whole system in just a part of the organisation or part of the system in the whole organisation. Phased implementation - implementing the system in stages. 2 disadvantages from: Direct changeover – if the solution does not work properly, difficult to get the old system back.	2
	Parallel running – costs a lot in wages for two sets of staff. Pilot – takes time to implement. Phased implementation – takes time to implement.	2

Page 4 of 5

MARK SCHEME SHEET

Subject/Paper No: 0418/2

Month: November

Question Number	Answers	Part Mark
16	Technical documentation:	
	Two reasons from:	
	So that modifications to the system/program can be made.	
	In case original programmer/analyst is unavailable errors can be corrected.	İ
	So that system/program can be updated	
	So that system can be re-installed in the event of system failure (can be in user	
	documentation instead)	
		2
	User documentation:	
	Two reasons from:	
	So user will know how to 'use' the system.	
	So user can cope with problems.	
	So user knows how to set up system.	
		2
17	Four from:	
	Benefits:	
	Can manage their finances more easily	
	Don't have to waste time travelling long distances to shops/banks.	
	Don't have to spend money on travelling expenses travelling long distances to	
	shops/banks.	
	Greater choice of goods than local shops.	
	No embarrassment of having to ask for loans face to face.	
	Can shop/bank when shops/banks are closed.	
	Disabled people don't have to leave the house.	
	Limitations:	
	Lose personal touch.	
	Less opportunity for socialising with friends/neighbours.	
	Can't touch/feel/see the goods in reality.	
	More expensive phone bills.	
	Lack of exercise.	
	Still have to go to the bank to withdraw cash	
	Can't have more than three benefits or limitations.	4
18	Use of videocams/microphones/webcams,	1
	modem / computer	1
	to connect people together on-line.	1
	Three from: Advantages:	
	Response is immediate.	
	More than two people can participate at the same time.	
	You can see all participants.	
	Work on documents etc. can take place collaboratively on-line.	
	Can demonstrate visually.	
	Body language can be interpreted	



Page 5 of 5

MARK SCHEME SHEET

Answers Disadvantages: Cost of setting up system Different time zones make Disruption caused by upg	e it difficult to synchronise confer		Part Mark
Cost of setting up system Different time zones make	e it difficult to synchronise confer	· · · · · · · · · · · · · · · · · · ·	
	grading system.	ences.	3
,			



NOVEMBER 2003

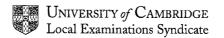
INTERNATIONAL GCSE

MARK SCHEME

MAXIMUM MARK: 70

SYLLABUS/COMPONENT: 0418/03

INFORMATION TECHNOLOGY Paper 3 (Practical)



Printout of the second e-mail prepared and ready to send to autoresponder-

Check send to address: design.h@ucles.org.uk
Check subject line ICTCOREX
Check for attachment present OGAWA.TXT
If candidate has attached file OGAWA.CSV instead of OGAWA.TXT then allow this

Marks to be deducted if incorrect:

address (1 mark) 1.2.1 subject (1 mark) 1.2.1 attachment (1 mark) 1.3.1

A. Student Name top left of page Does not have to be in the header

Date top right of page Does not have to be in the header

<today's date>
Heading inserted
Centre aligned
16 point, bold & italic

Different font to body text OCAWA BONSAI

Rootrainer name was taken in an attempt to add an oriental and authentic facade to this business. The idea was developed by Takeo Ogawa, who is the head of Rootrainer Trees has diversified during the past financial year and has set up a new business strand called Ogawa Bonsai. The decision to move away from the Rootrainer's 'South East Asian Division' which covers all operations in Japan, Thailand, Australia, India and Indonesia.

Takeo has taken the horticultural expertise of the English growers within the company and merged it with the tradition and mystery of the Japanese be culture. The marketing strategy which will be used to target initially the western European and North American markets will bring an image of sereni tranquility to every lounge, sitting room and office in these areas.

heading inserted (1) 3.2.1 centre align (1) 4.1.6

16 point (1) 5.5.1

bold (1)

A4 page size (1) 4.1.1 landscape (1) 4.1.2

different font (1)

margins (1) 4.1.4

Marks to be deducted if

incorrect: name top left (1) 4.1.6 date top right (1) 4.1.6

In order to fulfil this marketing strategy, Takeo has initiated a study into the preferred styles and species of trees for these new market places. Follow

initial studies, Takeo plans to initiate the propagation of sufficient quantities of the selected species to enable a major Europe wide and North American launch

of these new products. The summary of this research is:

Page break inserted here

A4 page size
Landscape
All margins 3.5 cm
Allow for paper feed inconsistencies with printers—(the line length must be between 22.5 and 23 cm)

Body text left aligned 10 point Double line spacing

Marks to be deducted if incorrect:

Page break (1) 5.4.1 Left aligned (1) 4.1.6 10 point (1) 5.5.1 double line spacing (1) 4.1.5 applied to all paragraphs (1) 4.1.5

Marks to be deducted if incorrect:

Document Present (1)

Document Complete with
paragraphing intact (1)

<today's date> A. Student There would be a need for several of Takeo's multilingual Japanese arborealists and two consultant bonsai masters to visit the growers within the European and

American divisions. The aim of these workshops would be to introduce the following areas:

propagation techniques

Marks to be deducted if incorrect: Bullet points present (1) **5.2.1** Bullet points indented (1) **5.1.1**

root pruning

wiring Bullet points

Indented at least 2cm Accept if start of text indented by 2cm from margin

bonsai seasons

These workshops and demonstrations would be to all the designated employees of Rootrainer Trees who were assigned responsibility for the 'Ogawa Bonsai' sections of the business. This instruction will of course include the selection of suitable material for growing good bonsai specimens. All packaging and distribution will be using our existing Rootrainer Trees network, at least in the initial phases.

favourite deciduous varieties on both continents. Unfortunately, this could lead to some time-related issues as some of the Acer species are very slow growing. They do make superb traditional bonsai specimens but have a growth rate which makes the commercial cultivation and fast-track production needed to keep As can be seen from the survey results, there will need to be different growing and marketing strategies for each of the divisions, with the North American markets requiring more coniferous varieties and the European markets preferring more deciduous trees. Some of the Acer species would appear to be the costs down very difficult. <today's date> A. Student

This may require an alternative business strategy to that originally proposed by Takeo. One strategy might be a dual approach; in other words, maintaining the ideal of fast-track production with large volumes of trees produced, and a secondary, more labour intensive development of these slow-growing trees which would not net any profit for a number of years. This would provide an alternative source of 'Premier' range trees for the 'more discerning customer' which after the initial market impact of the fast-track trees, may possibly open a secondary market. This secondary market must be seen as exclusive and to a degree be vastly overpriced, in order to cultivate a different client base.

It is proposed to target specific areas for this new market and the initial trial is proposed for the Knightsbridge area of London in conjunction with a very large and exclusive department store. This divergence from our usual marketing strategy should enable other aspects of our corporate development plan to grow. Many of these new clients may be interested in our other new ventures. The most popular trees from the European market research are: In summary, this should be seen as an opportunity to open new markets, never before dreamed of by the traditional nurseries. If successful, this should lead to increased and persistent company growth in the next few years.

Marks to be deducted if incorrect:

Automated page numbering (1) 4.1.3 Placement of numbers (1) 4.1.3

Page numbering bottom centre Does not have to be in the tooter Page orientation portrait

Marks to be deducted if incorrect: Page orientation (1) 4.1.2 accuracy Acer Palmatum (1) 6.2.1 accuracy Betula Nana (1) 6.2.1 accuracy Betula Pendulata (1) 6.2.1

Sort (2) 8.1.1

Acer or Betula

Check data entry of Acer Palmatum Ukon Must be 100% accurate

	<u> </u>	114 N. 114 114 114 114 114 114 114 114 114 11		1 / / / / / / / / / / / / / / / / / / /
Years Species	Variety	Europe	America	
25 Acer	Palmatum Kiyohime	75	34	
17 Acer	Palmatum Deisho	78	34	
10 Acer	Palmatum Ukon	82	46	
9 Betula	Nana	38	41	Marks to be deducted if incorrect:
9 Acer	Deshojo	70	34	Evidence that data file is present (2) 6.1.1
8 Acer	Japonicum Kashima	63	37	
8 Acer	Palmatum Kashima	70	37	
6 Betula	Pendulata	26	30	
6 Acer	Buergerianum	60	34	
1	Check	data entry o	f two reco	Marks to be deducted if incorrect:
/ L		100% accurate		Search (2) 8.2.1

Search Species = Acer or Betula

Sorted in descending order on 'Years'

ni ieais

A. Student

Marks to be deducted if incorrect: Position of name (1) 9.1.3

Name bottom right of report Does not have to be at the bottom of the page

Marks to be deducted if incorrect: Heading (1) 9.1.2 Sort (2) 8.1.1

Sorted in ascending order on 'Variety'

Pinus in America

Heading 'Pinus in America' at the top

Does not have to be in the header and any alignment is acceptable

Can be any order or layout

Marks to be deducted if incorrect: 3 fields displayed (1) 9.1.1 search (2) 8.2.1

Parviflora	Pinus	60
Pentaphylla	Pinus	62
Pinta Phylla	Pinus	58
Sylvestris Beavinestrus	Pinus	62
Sylvestris Globosa	Pinus	60

Species

Calculated Field
Average America calculated

Only these 3 fields selected

Average

Pinus

Marks to be deducted if incorrect:
Calculated control (2) 7.1.1

America

64

61

Position (1) 9.1.3

Search 'Species' = Pinus

A. Student

Variety

Thunbergii

Name bottom left of report Does not have to be at bottom of the page Marks to be deducted if incorrect: Name position (1) 9.1.3 Page Portrait orientation
All margins 2cm
Allow for paper feed inconsistencies with
printers – (the line length must be between
16.75 and 17.25 cm)

OGAWA BONJAI

<today's date>
Heading present
Any alignment, font or point
size is acceptable

Rootrainer Trees has diversified during the past financial year and has set up a new

Marks to be deducted if incorrect: Page orientation (1) 4.1.2 Margins (1) 4.1.4

Heading inserted (1) 3.2.1

Bonsai. The the Rootrainer apt to add an

this business.

The idea was developed by Takeo Ogawa, who is the head of Rootrainer's 'South East Asian Division' which covers all operations in Japan, Thailand, Australia, India and Indonesia.

Takeo has taken the horticultural expertise of the English growers within the company and

Marks to be deducted if incorrect: Image inserted (1) 10.1.1 Placement (1) 3.3.2 Scaling (1) 3.3.2 Text wrap (1) 3.3.2 y of the arketing initially nerican

tranquility to every lounge, sitting room and office in these areas.

In order to fulfil this marketing strategy,
Takeo has initiated a study into the preferred styles
Following the initial studies, Takeo plans to initial selected species to enable a major Europe wide an approximate the initial studies of the process of the proce

The summary of this research is:

Image of any tree/s inserted It may contain a tree or any constituent part Placed bottom right of page Graphic area no more than 40% of printed page and
les no less than 15% of page es. Orientation of graphic not important

Species	Deciduous	Coniferous	Market
Larix	Yes		Europe
Acer	Yes		Europe
Ulmus	Yes		Both
Picea		Yes	America
Pinus		Yes	America
Juniperus		Yes	America

Marks to be deducted if incorrect: Table inserted (1) 5.3.1 7 rows (1) 5.3.1 4 columns (1) 5.3.1 data entry (1) 3.2.1

Table inserted here Allow 3 data entry errors

There would be a need for several of Takeo's multilingual Japanese arboreansis and two consument bonsai masters to visit the growers within the European and American divisions. The aim of these workshops would be to introduce the following areas:

propagation techniques

• root pruning

wiring

bonsai seasons

Marks to be deducted if incorrect: Text fully justified (1) 4.1.6 12 point (1) 5.5.1 single line spacing (1) 4.1.5

applied to all paragraphs (1) 4.1.5

Body text fully justified 12 point Single line spacing

These workshops and demonstrations would be to all the designated employees of Rootrainer Trees who were assigned responsibility for the 'Ogawa Bonsai' sections of the business. This instruction will of course include the selection of suitable material for growing good bonsai specimens. All

A. Student <today's date>

packaging and distribution will be using our existing Rootrainer Trees network, at least in the initial phases.

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This may require an alternative business strategy to that originally proposed by Takeo. strategy might be a dual approach; in other words, maintaining the ideal of fast-track production with large volumes of trees produced, and a secondary, more labour intensive development of these slow-growing trees which would not net any profit for a number of years.

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development plan to grow. Many of these new clients may be il Database extract placed here The most popular trees from the European market research

Format of the extract is not important

Species Variety Europe Years Acer Palmatum Kashima 8 70 9 Acer Deshojo 70

Marks to be deducted if incorrect Placing of extract (1) 10.1.1 Search (2) 8.2.1 4 fields displayed (1) 9.1.1

In sum by th groy

hary, this should be seen as an opportunity to open new markets, never before dreamed of raditional nurseries. If successful, this should lead to increased and persistent company n the next few years.

Searching for Europe > 65 AND 'Years' <10 Marks to be deducted if incorrect No widow (1) 5.4.1 No orphan (1) 5.4.1 No split lists (1) 5.4.1 No split tables (1) 5.4.1

Check for no widows, orphans or lists or tables which overlap two pages

Marks to be deducted if incorrect Page numbering moved (1) 4.1.3

> Page numbering moved to bottom left Does not have to be in the footer

Page N



NOVEMBER 2003

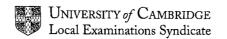
INTERNATIONAL GCSE

MARK SCHEME

MAXIMUM MARK: 72

SYLLABUS/COMPONENT: 0418/04

INFORMATION TECHNOLOGY
Paper 4 (Practical)



IGCSE IT November 2003 (Data Analysis)

Cut Cost = Lookup(Gem cut in Named Range)/Carat
Alignment not important.
Row/Column may not be the same as this example.
Must display the use of a named range.

Cutting options
Gem cut cabochons faceted Cutting cost 5 10

IF Precious = p 2.5 else 1.5
Alignment not important
Row/Column may not be the same as this example
Do not penalise the use of named cells/ ranges

Marks to be deducted if incorrect:

Main table & Cutting table created as shown (1) 12.1.1

Total value Formula correct (1) 12.1.3

Formulae replicated correctly (1) 12.1.3

Named range "cut" used (1)

IF Function used correctly (2) 12.1.4

LOOKUP (may be vlookup, hlookup) function used correctly (1) 12.1.4

All of the formulae visible (1) 14.2.1

All of the formulae visible (1) 14.3.1 Landscape orientation (1) 14.3.1 Formulae printout present (2)

Name	Precious	Gem	Carat	Carat Value	Cut Cost	Insurance	Total Value
		Cut			=LOOKUP(C7,cut)/D7	=IF(B7="p",D7*2.5,D7*1.5)	=D7*E7+F7+G7
					=LOOKUP(C8,cut)/D8	=IF(B8="p",D8*2.5,D8*1.5)	=D8*E8+F8+G8
					=LOOKUP(C9,cut)/D9	=IF(B9="p",D9*2.5,D9*1.5)	=D9*E9+F9+G9
					=LOOKUP(C10,cut)/D10	=IF(B10="p",D10*2.5,D10*1.5)	=D10*E10+F10+G10
					=LOOKUP(C11,cut)/D11	=IF(B11="p",D11*2.5,D11*1.5)	=D11*E11+F11+G11
					=LOOKUP(C12,cut)/D12	=IF(B12="p",D12*2.5,D12*1.5)	=D12*E12+F12+G12
					=LOOKUP(C13,cut)/D13	=IF(B13="p",D13*2.5,D13*1.5)	=D13*E13+F13+G13
					=LOOKUP(C14,cut)/D14	=IF(B14="p",D14*2.5,D14*1.5)	=D14*E14+F14+G14
					=LOOKUP(C15,cut)/D15	=IF(B15="p",D15*2.5,D15*1.5)	=D15*E15+F15+G15
					=LOOKUP(C16,cut)/D16	=IF(B16="p",D16*2.5,D16*1.5)	=D16*E16+F16+G16
					=LOOKUP(C17,cut)/D17	=IF(B17="p",D17*2.5,D17*1.5)	=D17*E17+F17+G17
					=LOOKUP(C18,cut)/D18	=IF(B18="p",D18*2.5,D18*1.5)	=D18*E18+F18+G18

Formula:

Carat*Carat Value plus Cut Cost plus Insurance
Alignment not important
Row/Column may not be the same as this example
Do not penalise the use of named cells/ ranges

Page orientation tandscape
This printout must show formulae view
Column width / row height must show all of formulae and labels

Replication: All 3 formulae correctly replicated IGCSE IT November 2003 (Data Analysis)

Format the results in the Carat Value, Cut Cost, Insurance and Total Value columns to currency showing the \$ and 2 dp

Cutting options
Gem cut cabochons faceted
Cutting cost 5 10

ns faceted

Marks to be deducted if incorrect:

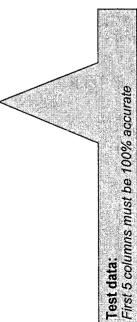
Data added 100% accurately (4) 12.1.2 deduct 1 mark per error
4 columns formatted to 2dp (1) 14.1.1

All data is visible (1) 14.2.1

All data fits on 1 page (1) 14.3.1

4 columns currency \$ used (1) 14.1.1

Name	Precious	Gem	Carat	Carat Carat Value	Cut Cost	Insurance	Insurance Total Value
		cut					
Amethyst	ds	faceted	17.9	\$5.00	\$0.56	\$26.85	\$116.91
Amethyst	ds	cabochons	25.87	\$6.00	\$0.19	\$38.81	\$194.22
Aquamarine	ds	faceted	2.23	\$31.50	\$4.48	\$3.35	\$78.07
Citrine	ds	faceted	18.88	\$12.00	\$0.53	\$28.32	\$255.41
Diamond	ci.	faceted	0.29	\$862.00	\$34.48	\$0.73	\$285.19
Emerald	۵	cabochons	0.42	\$357.00	\$11.90	\$1.05	\$162.89
Garnet	ds	cabochons	6.34	\$26.00	\$0.79	\$9.51	\$175.14
Peridot	ds	faceted	3.52	\$30.00	\$2.84	\$5.28	\$113.72
Ruby	a	faceted	2.0	\$286.00	\$14.29	\$1.75	\$216.24
Sapphire	c.	faceted	1.51	\$100.00	\$6.62	\$3.78	\$161.40
Tanzanite	ds	cabochons	1.12	\$151.00	\$4.46	\$1.68	\$175.26
Topaz	ds	faceted	15.8	\$11.00	\$0.63	\$23.70	\$198.13



Page orientation not specified
This printout must show data and fit on a single page

Searching:
Total Value is greater than 150 and Precious is sp
Only these five rows should be visible

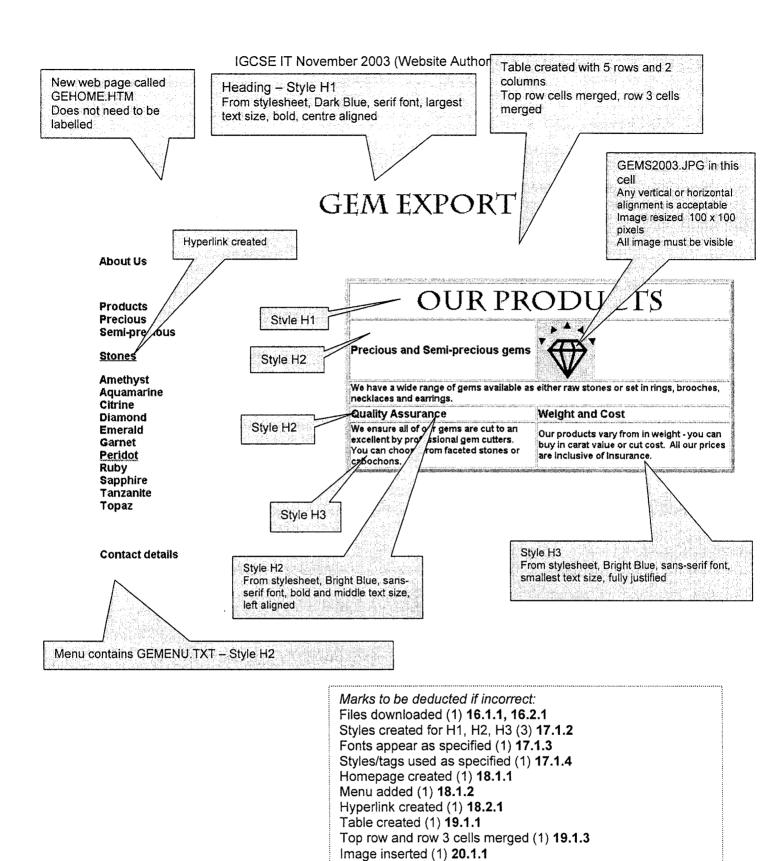
Name	Precious	Gem cut	Carat	Precious Gem cut Carat Carat Value Cut Cost Insurance Total Value	Cut Cost	Insurance	Total Value
Amethyst	ds	cabochons 25.87	25.87	\$6.00	\$0.19	\$38.81	\$194.22
Citrine	ds	faceted	18.88	\$12.00	\$0.53	\$28.32	\$255.41
Garnet	ds	cabochons	6.34	\$26.00	\$0.79	\$9.51	\$175.14
Tanzanite	ds	cabochons	1.12	₩.	\$4.46	\$1.68	\$175.26
Topaz	ds	faceted	15.8	\$11.00	\$0.63	\$23.70	\$198.13

Marks to be deducted if incorrect: Correct data extracted (2) 13.1.1

Searching:
Facet equals faceted and Insurance less than 5.00
Only these four rows should be visible

\$78.07 \$216.24 \$285.19 \$161.40 **Total Value** \$3.35 \$1.75 \$3.78 \$0.73 Insurance \$14.29 Carat Value Cut Cost \$4.48 \$34.48 \$6.62 \$31.50 \$862.00 \$286.00 \$100.00 2.23 0.7 1.51 Carat Gem cut faceted faceted faceted faceted Precious ds Aquamarine Name Diamond Sapphire Ruby

Marks to be deducted if incorrect:
Correct data extracted (2) **13.1.1**



HTML code is likely to vary greatly from this example – only check for required elements.

- Note that some candidates may use .JPEG as an extension. Do not penalise this.
- Note that if no html code is included, a visual check of the table is not sufficient, and marks should be deducted, as you cannot check that a style sheet has been used. No PC's from section 17 can be awarded.

```
<html>
<head>
<meta http-equiv="Content-Type" content="text/html; charset=windows-1252">
<meta name="GENERATOR" content="Microsoft FrontPage 4.0">
                                                                     Marks to be deducted
<meta name="ProgId" content="FrontPage.Editor.Document">
                                                                     if incorrect:
<title>Gem Export</title>
                                                                     External stylesheet
                                                                     attached (1) 17.1.1
<link rel="stylesheet" type="text/css" href="gem.css">
</head>
<body>
                                              External stylesheet attached to web page
<h1>Gem Export</h1>
<h2>&nbsp;</h2>
<h2>About Us</h2>
<div align="left">
  Check for table border set to 4 point
       <h1>Our Products</h1>
     Marks to be deducted if
       <h2>Precious and Semi-precious gems</h2>
                                                                incorrect:
                                                                Border set to 4 (1) 19.1.2
     <td_width="51%"><img border="0" src="GEMS2003.JPG" width="100"
height="100">
   <h3>We have a wide range of gems available as either ra
or set in rings, brooches, necklaces and earrings.</h3>
     Check graphic size for GEMS2003.JPG is
   set to width 100, height 100
   <h2>Quality Assurance</h2>
     Marks to be deducted if incorrect:
     Graphic resized to 100x100 (1) 20.2.1
       <h2>Weight and Cost</h2>
     <t.r>
     <h3>We ensure all of our gems are cut to an excellent by
professional gem cutters. Enbsp; You can choose from faceted stones or
cabochons.</h3>
     <h3>Our products vary from in weight - you can buy in carat
value or cut cost. anbsp; All our prices are inclusive of Insurance. </h3>
     </div>
<h2>Products<br>
```

IGCSE IT November 2003 (Website Authoring)

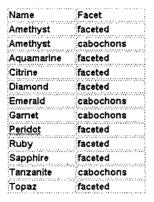
Precious
 Semi-precious</h2> <h2>Stones</h2> <h2>Amethyst
 Reference from hyperlink 'Stones to Aquamarine
 open GEMS.HTM in new window Citrine
 called EXTERNAL Diamond
 Marks to be deducted if incorrect: Allow "external" which is also correct. Emerald
 Opens in window 'External' (1) 18.2.2 Garnet
 Peridot
 Ruby
 Sapphire
 Tanzanite
 Topaz

 </h2> <h2>Contact details</h2> </body> </html> Marks to be deducted if incorrect: Html printed (1) 21.1.1 Webpage printed (1) 21.1.1

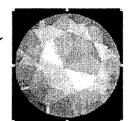
FACETS

Our products are cut to requests of our customers.

Many products are hand cut to ensure quality. The variety of stones and cuts is shown in the table below:

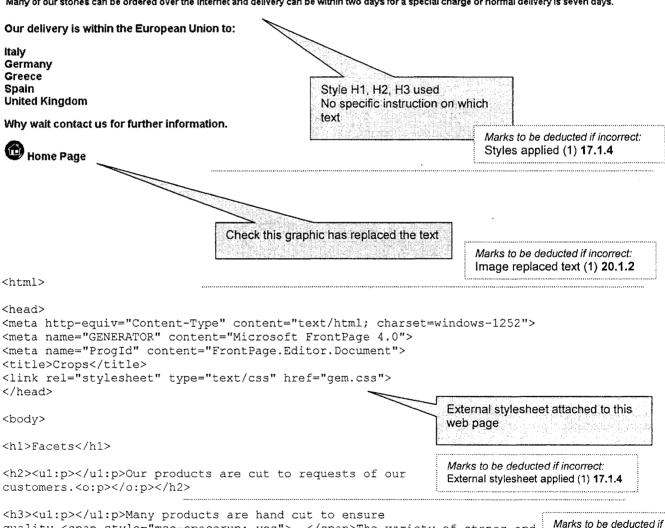


PRES2003 JPG in this cell Any vertical or horizontal alignment is acceptable Image resized 150 x 150 pixels All image must be visible



Marks to be deducted if incorrect: Image inserted (1) 20.1.1

Many of our stones can be ordered over the internet and delivery can be within two days for a special charge or normal delivery is seven days.



quality. The variety of stones and cuts

Image resized (1) 20.2.1

PRES2003.JPG

is shown in the table below:<o:p></o:p></h3>

<col width="64" span="2" style="width:48pt">

<h3>Name</h3>

Image resized 150 x 150 pixels All image must be visible

Any vertical or horizontal

alignment is acceptable

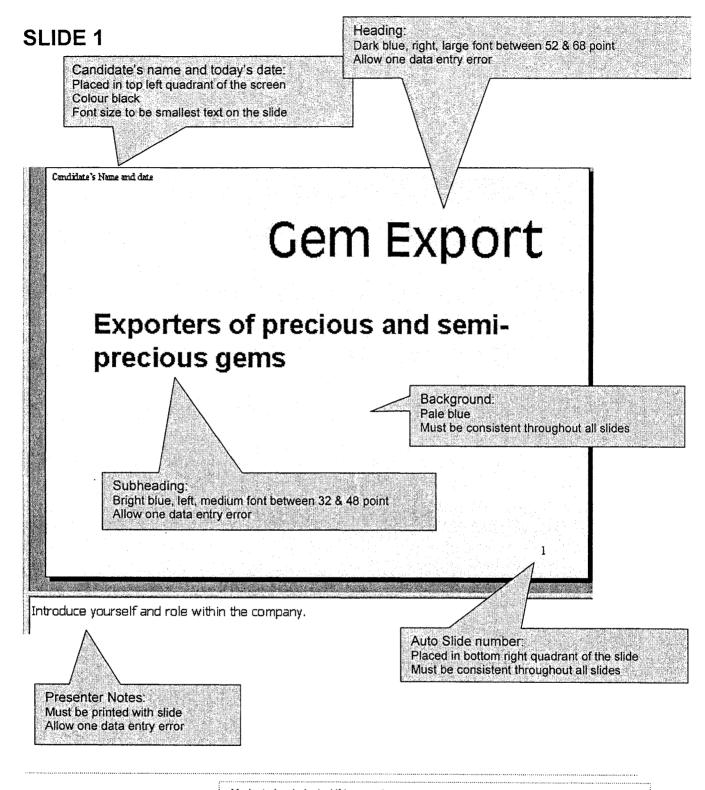
incorrect:

```
<h3>Facet</h3>
<h3>Amethyst</h3>
<h3>faceted</h3>
<h3>Amethyst</h3>
<h3>cabochons</h3>
<h3>Aquamarine</h3>
<h3>faceted</h3>
<h3>Citrine</h3>
<h3>faceted</h3>
<h3>Diamond</h3>
<h3>faceted</h3>
<h3>Emerald</h3>
<h3>cabochons</h3>
<h3>Garnet</h3>
<h3>cabochons</h3>
<h3>Peridot</h3>
<h3>faceted</h3>
```

IGCSE IT November 2003 (Website Authoring)

```
<h3>Ruby</h3>
  <h3>faceted</h3>
   <h3>Sapphire</h3>
   <h3>faceted</h3>
  <h3>Tanzanite</h3>
   <h3>cabochons</h3>
   <h3>Topaz</h3>
  <h3>faceted</h3>
   <h3><u1:p></u1:p>Many of our stones can be ordered over the Internet and
delivery
can be within two days for a special charge or normal delivery is seven
days.<o:p></o:p></h3>
<h2><ul:p></ul:p>Our delivery is within the European Union to: </h2>
<h2 style="word-spacing: 0; line-height: 100%; margin: 0">Italy</h2>
<h2 style="word-spacing: 0; line-height: 100%; margin: 0">Germany</h2>
<h2 style="word-spacing: 0; line-height: 100%; margin: 0">Greece</h2>
<h2 style="word-spacing: 0; line-height: 100%; margin: 0">Spain/h2>
<h2 style="word-spacing: 0; line-height: 100%; margin: 0">United
Kingdom<o:p></o:p></h2>
<h2><ul:p></ul:p>Why wait contact us for further information.</h2>
<h2> <a href="gehome.htm"><img border="0" src="HOME.GIF" width="35"
height="35"></a>
Home Page </h2>
              Marks to be deducted if incorrect:
              Image converted to GIF (1) 20.2.2
</body>
              Image resize (1) 20.2.1
</html>
```

Check for HOME GIF not JPG Width 35, Height 35 Check hyperlink from graphic to GEHOME.htm



Marks to be deducted if incorrect:

Master slide:

Candidate name and date top left, black, small text, (1) 22.1.1 Heading formatted correctly, (1) 22.1.1

Subheading formatted correctly, (1) 22.1.1

Background pale blue, (1) 22.1.1

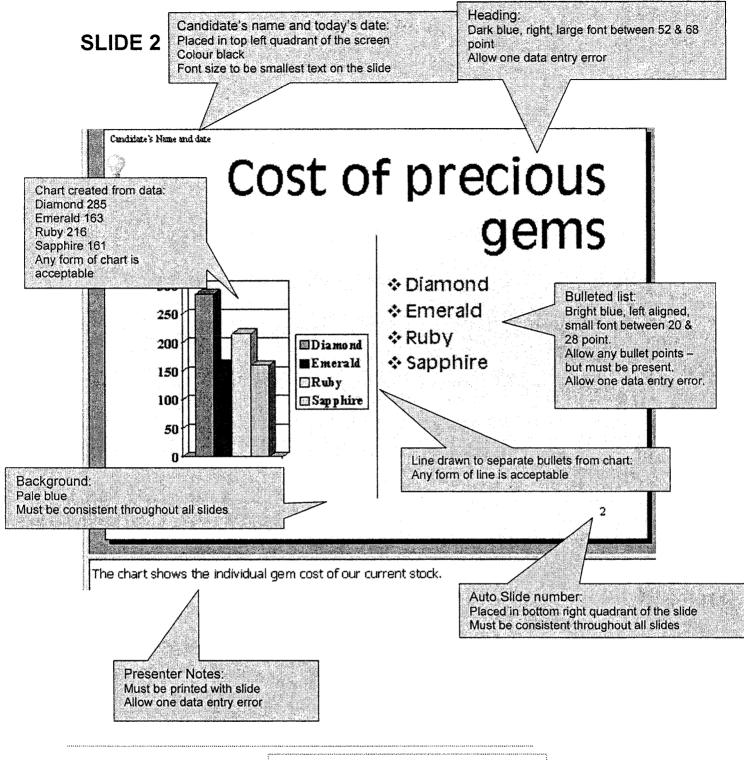
Slide numbers bottom right, (1) 22.1.1

Text of heading entered correctly, (1) 22.2.1

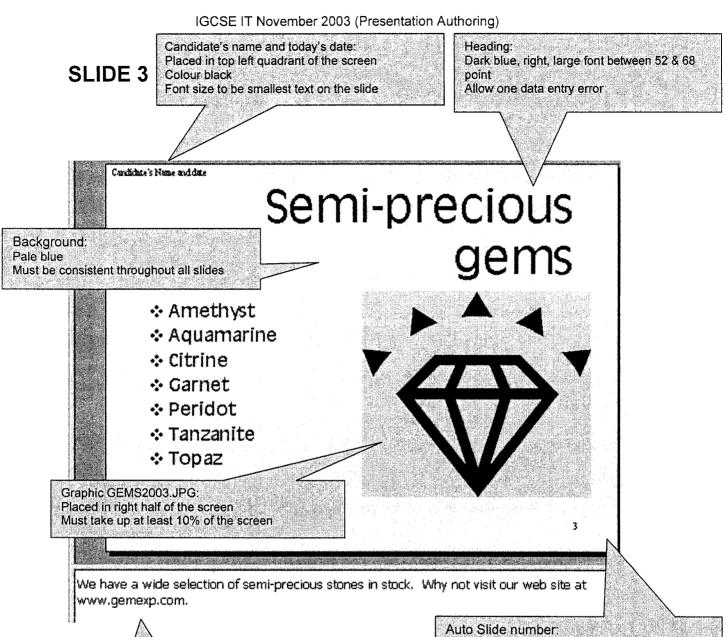
Text of subheading entered correctly, (1) 22.2.1

Presenter notes present, (1) 24.1.1

Presenter notes correct + in the right place (1) 24.1.1



Marks to be deducted if incorrect:
Chart created correctly (1) 22.3.2
Bulleted list added correctly (1) 22.3.1
Heading correct (1) 22.2.1
Presenter notes present, (1) 24.1.1
Presenter notes correct + in the right place (1) 24.1.1
Background pale blue, (1) 22.1.1
Slide numbers bottom right, (1) 22.1.1
Line present (1) 22.3.3



Presenter Notes: Must be printed with slide Allow one data entry error Placed in bottom right quadrant of the slide Must be consistent throughout all slides

Marks to be deducted if incorrect:
Heading correct (1) 22.2.1
Presenter notes present, (1) 24.1.1
Presenter notes correct + in the right place (1) 24.1.1
Background pale blue, (1) 22.1.1
Slide numbers bottom right, (1) 22.1.1
GEMS2003.jpg inserted correctly (1) 22.3.1

Slide transitions from ARF (1)