

UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS
Cambridge International Diploma in ICT
Standard Level

DATA ANALYSIS

5192/A

Optional Module: Practical Assessment

2005

No Additional Materials are required

**1 hour
and 15 minutes reading time**

READ THESE INSTRUCTIONS FIRST

Candidates are permitted **15 minutes** reading time before attempting the paper.

Make sure that your name, centre number and candidate number are shown on each printout that you are asked to produce.

Carry out **every** instruction in each task.

Tasks are numbered on the left hand side of the page, so that you can see what to do, step by step. On the right hand side of the page for each task, you will find a box which you can tick (✓) when you have completed the task; this checklist will help you to track your progress through the assessment.

Before each printout you should proof-read the document to make sure that you have followed all instructions correctly.

At the end of the assignment put **all** your printouts into the Assessment Record Folder.

This document consists of **4** printed pages.

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UNIVERSITY of CAMBRIDGE
International Examinations

[Turn over

You work for an electrical retail company called Electry. Your manager has asked you to calculate the current stock position for stock items.

All currency values should be in dollars with the \$ sign visible.

1 Create a data model which looks like this:



1.1.1

Information Table	
Mark-up	0.03
	0.05
Number of items	
Small	
Large	

Date	Item	Size of item	Purchase	Increase	Sale
	Café espresso				
	Freezer				
	Fridge				
	Fridge/Freezer				
	Heater				
	Iron				
	Kettle				
	Microwave				
	Oven				
	Tumble Dryer				
	Vacuum Cleaner				
	Washing Machine				

The cells in these columns will represent:

<i>Date</i>	Date of stock in
<i>Item</i>	The type of electrical equipment
<i>Size of item</i>	Whether a large item or a small item
<i>Purchase</i>	The price paid for each item
<i>Increase</i>	The value added to each item based on the Purchase price. If the Purchase price is greater than or equal to 300, then the increase is 5%. Otherwise the increase is 3%.
<i>Sale</i>	The price each item is sold at, including the increase
Information Table	
<i>Mark-up</i>	The percentage increase added on all items
<i>Number of items</i>	Count of the number of items.

- 2 In the *Information Table*, name the cell that holds the data 0.03 **three**. Name the cell that holds the data 0.05 **five**. 1.1.3
- These named cells will be used to calculate the *Increase*
- 3 In the main table in the cell under *Increase*, enter a formula using IF. This formula calculates the mark-up on the first item. 1.1.4
- If the *Purchase* is greater than or equal to **300** then multiply the *Purchase* by the named cell **five** to calculate the *Increase*
- If the *Purchase* is less than **300** then multiply the *Purchase* by the named cell **three** to calculate the *Increase*
- 4 In the main table in the cell under *Sale*, enter a formula which adds the *Increase* to the *Purchase* 1.1.3
- 5 In the *Information Table*, format the cells containing the data 0.03 and 0.05 to display the % value with 0 decimal places (for example 5%). 3.1.1
- 6 In the *Information Table*, use Countif to count the number of items where the *Size of item* is **Small**. Place the result in the cell to the right of the heading *Small*. 1.1.4
- In the *Information Table*, use Countif to count the number of items where the *Size of item* is **Large**. Place the result in the cell to the right of the heading *Large*.
- 7 Format the cells in the *Date* column to a long date format (for example March 12, 2004). 3.1.1
- 8 Format the cells in the *Purchase*, *Increase*, and *Sale* columns to display the \$ sign (dollar) with 2 decimal places. 3.1.1
- 9 Copy down all formulae entered in steps 3 - 4 so that 12 rows of data can be entered. 1.1.1
- 10 Set the page orientation to landscape. 3.3.1
- 11 Save the data model and print a copy of the sheet showing the formulae used. Make sure that the contents of all cells are visible and that the printout fits onto a single printed page. 3.2.1
4.1.1

- 12 Enter the following data into the model to test that it works correctly:



1.1.2
1.2.1

Date	Item	Size of item	Purchase
January 24, 2005	Café espresso	Small	29
January 30, 2005	Freezer	Large	399
February 6, 2005	Fridge	Large	305
February 15, 2005	Fridge/Freezer	Large	560
March 19, 2005	Heater	Small	20
March 20, 2005	Iron	Small	15
March 26, 2005	Kettle	Small	25
April 2, 2005	Microwave	Small	250
May 2, 2005	Oven	Large	678
May 7, 2005	Tumble Dryer	Large	299
May 17, 2005	Vacuum Cleaner	Small	78
May 22, 2005	Washing Machine	Large	695

- 13 Save this data and print a copy showing the values. Make sure that the contents of all cells are visible and that the printout fits onto a single printed page.
- 14 Produce a printout showing only the rows where the *Size of item* contains *Small*
- 15 Produce a printout showing only the rows where the *Date* is after *13 March 2005* and the *Purchase* is greater than *500*



3.2.1
4.1.1



2.1.1
4.1.1



2.1.1
4.1.1

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DATA ANALYSIS

5192/B

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and 15 minutes reading time**

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You work for a camera company called Dygitell. Your manager has asked you to calculate the retail price of current stock for digital cameras.

All currency values should be in dollars with the \$ sign visible.

1 Create a data model which looks like this:



1.1.1

Information Table	
Mark-up	0.05
	0.07
Number of types	
Novice	
Expert	

Date	Make	Type	Purchase	Increase	Sale
	Argus				
	Canon				
	Casio				
	Fuji				
	Kodak				
	Konica				
	Minolta				
	Nikon				
	Olympus				
	Pentax				
	Sony				
	Toshiba				

The cells in these columns will represent:

<i>Date</i>	Date of stock in
<i>Make</i>	The make of the camera
<i>Type</i>	Camera for either the novice or the expert
<i>Purchase</i>	The price paid for each camera
<i>Increase</i>	The value added to each item based on the Purchase price. If the Purchase price is greater than or equal to 300, then the increase is 7%. Otherwise the increase is 5%.
<i>Sale</i>	The sale price of each camera including the increase.

Information Table	
<i>Mark-up</i>	The percentage increase added to the price of all stock items
<i>Number of types</i>	Count of the number of types.

- 2 In the *Information Table*, name the cell that holds the data 0.05 **five**
Name the cell that holds the data 0.07 **seven** 1.1.3
- These named cells will be used to calculate the *Increase*
- 3 In the main table in the cell under *Increase*, enter a formula using IF. This
formula calculates the mark-up on the first stock item. 1.1.4
- If the *Purchase* is greater than or equal to **300** then multiply the *Purchase* by
the named cell **seven** to calculate the *Increase*
- If the *Purchase* is less than **300** then multiply the *Purchase* by the named cell
five to calculate the *Increase*
- 4 In the main table in the cell under *Sale*, enter a formula which adds the
Increase to the *Purchase* 1.1.3
- 5 In the *Information Table*, format the cells containing the data 0.05 and 0.07 to
display the % value with 0 decimal places (for example 5%). 3.1.1
- 6 In the *Information Table*, use Countif to count the number of cameras where
the *Type* is **Novice**. Place the result in the cell to the right of the heading
Novice. 1.1.4
- In the *Information Table*, use Countif to count the number of cameras where
the *Type* is **Expert**. Place the result in the cell to the right of the heading
Expert.
- 7 Format the cells in the *Date* column to a long date format (for example March
12, 2004). 3.1.1
- 8 Format the cells in the *Purchase*, *Increase*, and *Sale* columns to display the \$
(*dollar*) sign with 2 decimal places. 3.1.1
- 9 Copy down all formulae entered in steps 3 – 4, so that 12 rows of data can be
entered. 1.1.1
- 10 Set the page orientation to landscape. 3.3.1
- 11 Save the data model and print a copy of the sheet showing the formulae
used. Make sure that the contents of all cells are visible and that the printout
fits onto a single printed page. 3.2.1
4.1.1

- 12 Enter the following data into the model to test that it works correctly:



1.1.2
1.2.1

Date	Make	Type	Purchase
January 24, 2005	Argus	Novice	199
January 30, 2005	Canon	Novice	399
February 6, 2005	Casio	Novice	305
February 15, 2005	Fuji	Expert	560
March 19, 2005	Kodak	Novice	345
March 20, 2005	Konica	Novice	314
March 26, 2005	Minolta	Novice	399
April 2, 2005	Nikon	Expert	685
May 2, 2005	Olympus	Expert	1299
May 7, 2005	Pentax	Novice	299
May 17, 2005	Sony	Expert	595
May 22, 2005	Toshiba	Expert	1287

- 13 Save this data and print a copy showing the values. Make sure that the contents of all cells are visible and that the printout fits onto a single printed page.



3.2.1
4.1.1

- 14 Produce a printout showing only the rows where the *Type* contains *Novice*



2.1.1
4.1.1

- 15 Produce a printout showing only the rows where the *Date* is after 1 May 2005 and the *Purchase* is greater than 350



2.1.1
4.1.1

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