



# education

---

Department:  
Education  
**REPUBLIC OF SOUTH AFRICA**

**NATIONAL  
SENIOR CERTIFICATE**

**GRADE 12**

**COMPUTER APPLICATIONS TECHNOLOGY P1**

**NOVEMBER 2008**

**MARKS: 200**

**TIME: 3 hours**

**This question paper consists of 19 pages and 1 appendix.**

**INSTRUCTIONS AND INFORMATION**

1. Owing to the nature of this three-hour examination it is important to note that you will NOT be permitted to leave the examination room before the end of the examination period.
2. Insert your examination number and the question number in the header of EVERY document that you create or save.
3. The invigilator will give you a disk containing all the files needed for the examination or you will be told where the files can be found on the network. If a disk has been issued to you, you must write your name on the label; if you are working on the network, follow instructions provided by the invigilator.
4. A copy of the master files will be available from the invigilator. Should there be any problem with a file/files, you may request another copy from the invigilator.
5. Ensure that you save each document using the file name given in the question paper. Save your work at regular intervals as a precaution against possible power failures.
6. Read through each question before answering or solving the problem. Do NOT do more than is required by the question.
7. At the end of the examination you must hand in the disk given to you by the invigilator or make sure that ALL the files have been saved on the disk or on the network as explained to you by the invigilator/teacher. Make absolutely sure that all files can be read.
8. During the examination you may make use of the help functions of the programs which you are using. You may NOT use any other resource material.
9. Note that if data is derived from a previous question that you cannot answer, you should still proceed with the questions that follow.
10. Formulae and/or functions must be used for ALL calculations in questions involving spreadsheets unless specified otherwise. Absolute cell references must only be used where necessary to ensure that formulae are correct when they are copied to other cells in spreadsheets.
11. In all questions involving word processing, the language should be set to English (South Africa). The paper size is assumed to be A4 Portrait, unless instructed otherwise.

**NOTE:**

The data disk that you receive with this examination paper, will contain the following folder and files. Ensure that you have all the following folders and files before you begin this examination.

**A folder called:**

- Perez (contains sub-folders and files)

**Files called:**

- q1Answers (word processing file)
- q2CellOffers (word processing file)
- q3RepsInfo (word processing file)
- q4Suppliers (spreadsheet file)
- q5Usage (spreadsheet file)
- q6EasyCell (database file)
- q7Age (spreadsheet file)
- q7FormLetter (word processing file)
- q7Report (word processing file)
- q7Report (spreadsheet file)
- q7ReportDB (database file)
- q7Suppliers (spreadsheet file)

**SCENARIO**

Your friend's mother owns a franchise for a small cell phone company called 'EasyCell'. Your friend has arranged a part-time job for you at the cell phone company. His mother, Chloé Perez, has been running this company since January 2007. One of the new conditions of the franchise is that all data and information relevant to the company is computerised.

The computers are used to:

- Keep records of the clients
- Create financial statements for the company
- Generate monthly statements for the clients
- Store all correspondence

The computers are used by the following people:

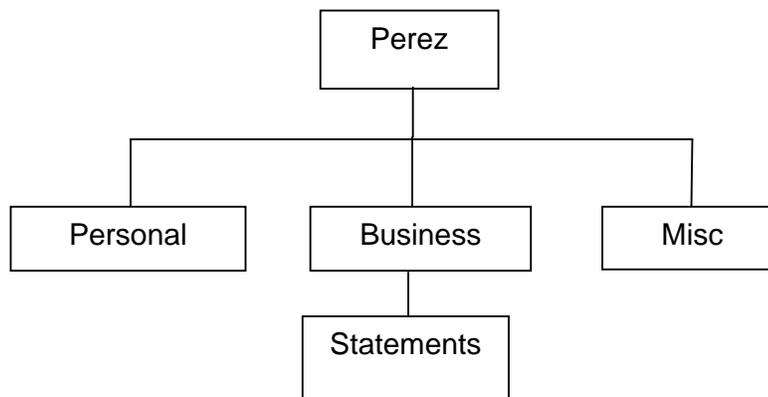
- The director
- The administration clerk
- The financial assistant
- The receptionist/typist
- The marketing personnel

The computers have been loaded with all the relevant software, that is an operating system and an office suite.

**QUESTION 1**

Ms Perez has many files on her computer. All her files, the family and business files, are mixed up together in a folder called Perez and its subfolders. She finds it increasingly difficult to access her files quickly. Locate the folder **Perez**.

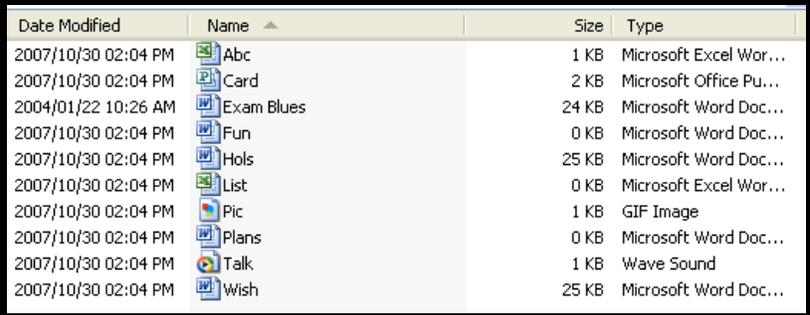
The following folder structure has been created.



- 1.1 Delete the file called **Games** in the folder called **Perez**. (1)
- 1.2 Make the file **TelNums.xls** in the **Perez** folder read-only. (1)
- 1.3 Add the password **Pins2pass** to the file **Pins.doc** in the **Perez** folder. (2)
- 1.4 Change the format of the file **Holiday Wish** in the **Perez** folder to Rich Text Format. (1)
- 1.5 Find the largest file in the **Perez** folder and enter the name of the file in the space provided in the file called **q1Answers.doc**. (1)
- 1.6 Ms Perez is looking for a file from the previous year's concert. She remembers that the word 'concert' appears in the file and that she saved it on her computer. Find the file and enter the name of the file in the space provided in the file called **q1Answers.doc**. (2)
- 1.7 Add to the folder structure by creating the subfolder called **Correspondence** in the **Business** folder. (2)
- 1.8 Move all the spreadsheet files from the **Perez** folder to the **Statements** folder. (2)
- 1.9 Copy all files that contain the word **Holiday** in the file name, from the **Perez** folder into the **Personal** folder. (2)

- 1.10 Create a shortcut to the **Personal** folder in the **Perez** folder. (2)
- 1.11 Ms Perez is concerned about the amount of disk space being used up by images and sound files. Determine the total amount of disk space that is used by such files in the **Perez** folder (not sub-folders). Enter the disk space used (in kilobytes) in the space provided in the file called **q1Answers.doc**. (2)
- 1.12 Change the display of the files in the folder **Misc**, showing the '**Date Modified**' first.

Make a screen dump/print screen/screen shot of this display with the headings as shown below.



Date Modified	Name	Size	Type
2007/10/30 02:04 PM	Abc	1 KB	Microsoft Excel Wor...
2007/10/30 02:04 PM	Card	2 KB	Microsoft Office Pu...
2004/01/22 10:26 AM	Exam Blues	24 KB	Microsoft Word Doc...
2007/10/30 02:04 PM	Fun	0 KB	Microsoft Word Doc...
2007/10/30 02:04 PM	Hols	25 KB	Microsoft Word Doc...
2007/10/30 02:04 PM	List	0 KB	Microsoft Excel Wor...
2007/10/30 02:04 PM	Pic	1 KB	GIF Image
2007/10/30 02:04 PM	Plans	0 KB	Microsoft Word Doc...
2007/10/30 02:04 PM	Talk	1 KB	Wave Sound
2007/10/30 02:04 PM	Wish	25 KB	Microsoft Word Doc...

Paste the image in the space provided in the file called **q1Answers.doc**. (2)

Remember to save the file **q1Answers.doc** and close the document. [20]

**QUESTION 2**

Open the file **q2CellOffers.doc**.

Remember to type in your examination number in the header of the document.

- 2.1 Change the font of the **entire** document to Arial 11 pt. (3)
- 2.2 Move the date from the top of the document and insert it as a footer. (2)
- 2.3 Make the heading **CELL PHONE OFFERS ON HANDSETS** stand out by using border and shading features. (2)
- 2.4 The volume of the handset is given as 40 cm<sup>3</sup>. Format the unit of the volume correctly to 40 cm<sup>3</sup>. (1)
- 2.5 Set your own tabs so that the details of the handsets appear as follows:
- |         |      |       |          |
|---------|------|-------|----------|
| Brand A | 5387 | ..... | R1009.99 |
| Brand B | X884 | ..... | R875.00  |
| Brand C | E541 | ..... | R799.49  |
| Brand D | R23Y | ..... | R650.50  |
| Brand E | G107 | ..... | R745.00  |
- (3)
- 2.6 Format the paragraph beginning with 'Furthermore ...' to allow for the following:
- 6 pt (0.2 cm) spacing before the paragraph
  - 12 pt (0.4 cm) spacing after the paragraph
- (3)
- 2.7 Insert a footnote based on the words 'overtime worked' in the paragraph beginning with 'Furthermore ...'.
- The footnote should be referenced with a symbol or a custom mark. It must read: 'Overtime will be paid at twice the normal rate.'
- (3)
- 2.8 Delete the comment at the end of the document. (1)
- 2.9 The director's name is formatted incorrectly. Edit the name so that it appears as Chloé Perez, with the accent sign on the e. (1)

- 2.10 Correct the closure of the document to appear as follows:

---

Chloé Perez  
DIRECTOR

The horizontal line of this closure must appear against the left-hand margin and at the bottom of the page. Keep the content of the closure as shown above.

*(NOTE: The footnote and all other texts must still be visible after carrying out this instruction.)* (4)

- 2.11 2.11.1 Insert a star shape from the drawing features of the word processing program at the bottom right-hand side of the page (not in the footer).
- 2.11.2 Add the text **AIM HIGH!** to the shape.
- 2.11.3 Insert a background/fill colour to the shape.
- 2.11.4 Make the outline of the star shape red. (5)
- 2.12 Carry out the TWO proof-reading instructions found in the right-hand margin of the document. (2)
- Remember to save the file and close the document. [30]

**QUESTION 3**

Open the file **q3RepsInfo.doc**.

Remember to type in your examination number in the header of the document.

3.1 3.1.1 Insert a page break (next page) before the words **Table of Contents**. (2)

3.1.2 Centre the text on the first page vertically. (1)

3.2 3.2.1 Format the heading 'Features of the GL CCC cell phone' with the style Heading 1. (1)

3.2.2 Use automatic outline numbering so that the text is exactly the same as that displayed below:

1.1 Call register

1.2 Games and more

1.2.a Other games

- Mr. Crane

- Mixit

1.2.b Settings

1.3 Contacts

1.4 Organiser

1.5 Multimedia

1.6 Messages

1.7 My stuff

1.8 Display

1.9 Profiles

1.10 Tools

1.11 Browser (3)

3.3 Refer to the following table in the document.

We say:	
<b>GOOD POINTS</b>	Camera, GPS
<b>BAD POINTS</b>	Battery life
A great buy but make sure you get an in-car charger	
<b>OVERALL</b>	★★★★
Contact 0861 BrandY	

3.3.1 Delete the first row of the table (We say: ...). (1)

3.3.2 Resize the table to fit the contents. (1)

3.3.3 Centre the table horizontally. (1)

3.4 Refer to the next table '**Handsets on promotion**'.

3.4.1 Merge and centre the contents of the first row. (1)

3.4.2 Split the table so that the last row is separated from the first part of the table. (1)

3.4.3 Change the text direction of '**Make & Model**' to vertical, and centre this text. (2)

3.4.4 Format all the inside lines with a thin red line. (The outside lines must remain the way they are.) (2)

Your final table for QUESTION 3.4 should resemble the one below:

Handsets on promotion		
Make & Model	BrandA 5387	R999
	BrandB X884	R875
	BrandC E541	R799
	BrandD R23Y	R650
	BrandE G107	R745

Offer available: 01/12/2008 → 15/12/2008

- 3.5      3.5.1 Convert the text under the heading 'NEW MODELS' to a table. (1)
- 3.5.2 Sort the table so that the prices are arranged from most expensive to least expensive. (1)
- 3.6      Insert an automatically generated table of contents below the heading, formatted with the page numbers right-aligned with leader tabs. (3)
- 3.7      Insert a footer with page numbers so that the page numbering does not appear on the first page. Right-align the footer. Retain any text already created in the footer. (3)
- 3.8      Insert a **field** into the footer showing the current date. (1)

Remember to save the file and close the document. **[25]**

**QUESTION 4**

Ms Perez has created a spreadsheet containing information relating to the supply of the cell phones.

Open the file **q4Suppliers.xls**.

4.1 Adjust the width of column A so that all the data can be read. (1)

4.2 Insert a custom header as follows:

**Left section:** Your Exam Number

**Right section:** Suppliers

(2)

4.3 Format all dates to a Month-Day format, e.g. July-14. (1)

4.4 Insert a function in cell B16 to calculate the average number of cell phones supplied. Round this number off to zero decimal places. (4)

4.5 Insert a function in cell B18 to calculate the second highest number of cell phones supplied. (3)

4.6 If more than 50 cell phones are supplied, Ms Perez receives a 10% discount; if less than 5 are supplied, there is no discount; otherwise a discount of 5% is given.

Display the percentage discount for each company, based on the above criteria, in column D.

(5)

4.7 Create a pie chart in a new sheet showing the number of cell phones supplied by each company. Provide a suitable heading and display the values for each pie slice. (3)

4.8 Sort the data in ascending order according to the number of cell phones supplied. (1)

Remember to save the file and close the document. **[20]**

**QUESTION 5**

Ms Perez uses a spreadsheet to look at the customer profiles and to analyse the usage of the cell phones.

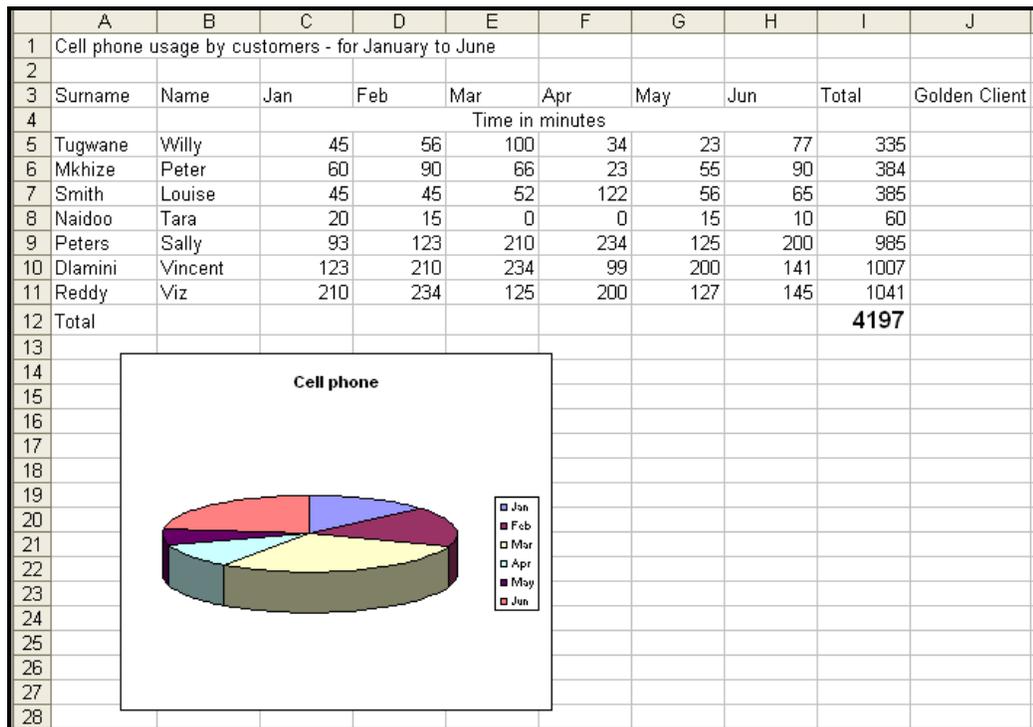
Open the file **q5Usage.xls**.

Remember to type in your examination number in the header of the document.

- 5.1 EasyCell allows customers to use cell phones in the shop for a fee. Ms Perez wants to analyse the usage of the clients. She has entered the basic details, but needs your assistance to analyse it.

Work on the worksheet PHONE USAGE.

A screenshot of this worksheet is shown below:



- 5.1.1 It is difficult to interpret the spreadsheet. Format the main heading in cell A1 so that it looks different from the other headings. (1)
- 5.1.2 Ms Perez wants to issue each of these clients with a client ID.
- Insert a new column, with the heading Client ID, to the left of column C.
  - Use a formula to create a client ID. The client ID consists of the first 3 letters of the surname plus the last 3 letters of the name, e.g. Willy Tugwane's client ID will be Tugly.
  - Make sure that a client ID appears in column C for every client. (7)
- 5.1.3 Ms Perez wants to identify Golden clients who should be rewarded with a discount. Golden clients are those clients who used more than 900 minutes in total. The words 'Golden client' must appear in column K after the total for those clients that qualify as Golden clients.
- Use a function to identify the Golden clients. (3)
- 5.1.4 Insert a formula in cell K15 to show the minutes used in January by 'Golden clients'. (4)
- 5.1.5 The given pie chart is meant to show the cell phone usage over different months in order to observe the trend. The chart represents Willy Tugwane's usage; however it is difficult to interpret.
- Change the type of the graph so that it clearly shows a trend.
  - Label the graph by indicating suitable titles for the axes. (3)
- 5.2 The spreadsheet has a worksheet called DETAILS containing data about contracts. Ms Perez needs to do her financial planning using some statistics of her contract clients.
- 5.2.1 Rename the DETAILS worksheet to CELL PHONE SALES. (1)
- 5.2.2 Merge the heading in A1 over cells A1 to F1. (1)
- 5.2.3 Format the data in column E to display South African Rand to 2 decimal places. (2)
- 5.2.4 Insert a function in cell E25 to calculate the total income from the cell phone sales. (2)

5.2.5 Insert a function in cell B27 to calculate the number of clients using contract type A. (3)

5.2.6 The amount paid in column F by each client is calculated by using the value of the contract plus the administration fee found in cell D2.

Use a formula to calculate the amount paid by Mondi Zuki and display it next to his name. Ensure that it can be copied down correctly for the other remaining clients. (2)

5.3 Ms Perez wants to see the statistics concerning her sales and profits on one worksheet. Use the worksheet called COMPANY STATS.

5.3.1 In cell B11, create a link with the formula from the worksheet called CELL PHONE SALES (which was initially called DETAILS) to show the total income from contract clients (E25). (2)

5.3.2 In B7 calculate the total income from the phone calls by using the rate given on the worksheet.

Hint: Link to the worksheet PHONE USAGE to obtain the total minutes. (4)

Remember to save and close the document. [35]

## QUESTION 6

Ms Perez keeps details of her employees and her clients in a database.

6.1 Create a database called **q6Employees** that will help her to keep track of all people employed by EasyCell.

She needs the following fields:

Field	Data type
Surname-Name	Refer to 6.1.2
Cell number	Refer to 6.1.2
Date of birth	Refer to 6.1.2
Current debt	Refer to 6.1.2

6.1.1 Call the table **Employees** in the database you have created. (1)

6.1.2 Decide on the most appropriate data type for each field. (4)

- 6.1.3 Make sure that it is not possible to enter the same employee twice by setting a primary key on an appropriate field. (2)
- 6.1.4 Add the following details:
- Peter Ramoshaba, born on 30 April 1987, whose cell number is 0771234567 currently owes his employer R450.
- Save the table. (2)
- 6.2 Ms Perez wants to know specific details about her client base for marketing. Open the database **q6Easycell** and the table **q6Clients**.
- 6.2.1 She wants to send bulk SMSs to all the young people in her client database.
- Create a query that will display the clients younger than 25 showing only their:
- Surnames
  - Cellphone numbers
- Save the query as **q6Less25**. (5)
- 6.2.2 Ms Perez wants to offer a discount to her clients who are older than 30, who have the more expensive contract options, that is contract type B or C.
- Create a query that will display only the surnames and cell numbers of these clients.
- Save the query as **q6Older**. (6)

6.2.3 Ms Perez wants to have basic statistics about her clients for her marketing campaign.

- Create a report based on the **q6Clients** table that will give the alphabetical list of the surnames, together with cell numbers, age and contract type.
- The records must be grouped by contract type.
- The following statistics must appear:
  - The total number of clients per contract type
  - The average age of all her clients, showing no decimals at the end of the report

Show clear labels for all the statistics in the report.

Save the report as **q6ClientsReport**. (13)

6.3 Ms Perez has created a database of her suppliers. She needs to format it to make input of data easier and the data in the database table more reliable. In the database **q6EasyCell** open the table **q6Suppliers**.

6.3.1 The **Contact person** field must appear immediately after the **Supplier name** field. (1)

6.3.2 Format the field name **Supplier ID** so that it only accepts 10 letters/numbers or less. (1)

6.3.3 Make the **Contact person** field a required field. (1)

6.3.4 Set a default value of 7401 for the **Address 3** field. (1)

6.3.5 Add a validation rule to the **E-mail address** field; if the e-mail address entered does not contain the **@** symbol, then the text message '**Invalid**' should be displayed. (4)

6.3.6 Create a form using all the fields in the table **q6Suppliers**.

- Insert the heading/title **Suppliers** in the form.
- Insert the **current date** which updates automatically and without the time, in the form **footer**.

Save the form as **q6SuppForm**. (4)

[45]

**QUESTION 7**

- 7.1 EasyCell has produced a newsletter. Ms Perez has created this document, but she is not satisfied with the appearance and content. Reformat the document using her specifications as listed below.

Refer to **Appendix A** to see the desired result.

The files you will need to answer this question are listed below:

q7Report.doc  
q7Age.xls  
q7Report.xls  
q7Suppliers.xls  
q7ReportDB.mdb/q7ReportDB.odt  
q7FormLetter.doc

Open the file **q7Report.doc**.

- 7.1.1 Refer to the **Clients** section of the document.

- Insert the chart from the spreadsheet document **q7Age.xls** into the section for **Clients**.
- This entire clients section must be placed in 2 columns with a line in between. The chart and the text may not be in the same column. (4)

- 7.1.2 In the spreadsheet **q7Suppliers.xls** use conditional formatting in column C so that if the number of cell phones supplied exceeds 40, the cell contents are displayed in red with a cell border. (5)

- 7.1.3 Insert the data from the file **q7Suppliers.xls** as a table (after the paragraph) in the section **Cell Phone Suppliers**. This table must update automatically when data in **q7Suppliers.xls** is edited. (3)

- 7.1.4 Remove the hyperlink in the e-mail address in the suggested new logo section. (1)

- 7.1.5 Ensure that the company name (EasyCell) is not indicated as a spelling error. (1)

7.2 Ms Perez requires a table in the database (**q7ReportDB.mdb/q7ReportDB.odt**) showing the Names, Surnames, Contract\_values and Deposit details. The deposit is calculated at 10% of the contract value. Use the data in **q7Report.xls** to create this table. Use any method you wish to create this new table in the database. (6)

7.3 Open the file **q7FormLetter.doc**. This document serves as a form letter. The following tasks need to be completed to perform this mail merge.

- Use the **q6Clients** table in the **q6EasyCell** database as a data source.
- Add a merge field <Name> after the word 'Dear'.
- The letter must be sent to all clients between the ages 21 and 27 (including 21 and 27).
- Sort the letter according to the names.
- Save the merged letters as **q7Merge.doc**.

NOTE: Save the **q7FormLetter.doc** document before performing the mail merge. (5)

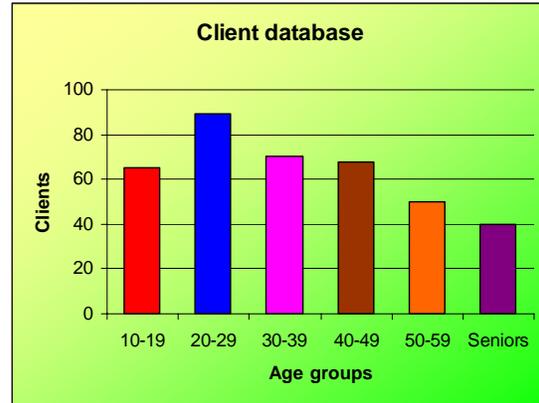
Remember to save and close the documents. [25]

**TOTAL: 200**

## Appendix A

### Clients

Our client base has expanded over the last quarter. As we have closed new contracts with the parents of school age children we our client base for the age group 10 – 19 has increased dramatically. We have had a steady growth in all other age groups and are now happy to report that we have 382 new contract clients.



### Cell Phone Suppliers

The business has formed excellent relations with our suppliers, ensuring a steady flow of new products at very good prices. With the discounts received from the suppliers we are also improving our general profitability. Our suppliers have been rated on a scale of 1 – 5 according to the reliability of service and supply and the amount of discount given. The back-up service if any equipment should be faulty was also considered.

Suppliers		
Supplier	Rating	Number supplied
Cell Magic	4	34
Happy Cells	3	25
Go Mobile	1	7
ABC Cellular	5	56
Newtown Cells	1	15
Mobile Magic	2	20
All Out Cellular	3	38
Mobile Cells	4	44
Quick Mobiles	5	72
Great Cellular Supplier	3	18
		329