|  |  |
| --- | --- |
|  |  |

**N5 COMPUTER PRACTICE**

**EXAMPLE EXAM PAPER 2**

**The files and a folder needed to answer all questions, are in the folder Exam Paper 1**

**The question paper consists of 19 pages**

|  |
| --- |
|  |

|  |
| --- |
| TIME: 3 HOURS  MARKS: 200 |

|  |
| --- |
|  |

INSTRUCTIONS AND INFORMATION

|  |  |  |
| --- | --- | --- |
| 1.  2.  3.  4.  5.  6.  7.  8.  9.  10. | This exam paper comprises of two sections, and you will receive the exam paper and the answer sheet in electronic form. Take note that the printed version of the paper differs from the electronic version as it may contain elements for typing and information snippets applicable to the question paper.  Answer ALL the questions, using the electronic documents provided to you and the appropriate software.  Note that you will not be allowed to leave the examination venue before the end of the examination period.  Save your work at regular intervals.  Read through each question before answering or solving the problem. Do not do more than is required by the question.  Note that no printing is required.  During the examination you may make use of the help facilities of the programs which you are using. You may not use any other resource material.  Note that if data is derived from a previous question that you cannot answer, you should still proceed with the questions that follow.  Formulas and/or functions must be used for all calculations in questions involving spreadsheets unless specified otherwise – in other words do not manually calculate and type in the answers!  Read ALL the questions carefully. |  |

Student Number:

Date:

PC:

**SECTION A [80]**

Open the document **Paper Introductory Section A Theory.docx** and save this document as **SectionA yourexamnumber.docx** (1)

Answer all the questions in this section using the electronic version of the question paper that will also represent your answer sheet.

Print your answers OR save your answers and share the file with, or send the file to the lecturer.

**QUESTION 1 [4]**

Enter the following to this document at the top of the page:

1.1 Add your student number, the date, and your examination number details to the top section of this page. (2)

1.2 Format your examination number only to bold. (1)

**QUESTION 2 [13]**

**Instructions**:

1. Answer the multiple-choice questions: Type or choose the correct answer to the questions below;

"*Click or tap here to enter text"* or "*Choose an item*" in the space provided or choose correct answer from drop-down list.

2. Change the font colour to **red** when you enter the letter or text to complete the answers. Use the *Format Painter* to copy the colour to all answers.

3. Save the answer file as **SectionA yourexamnumber.docx**

**Examples:**

Click Choose an item. or Click or tap here to enter text. for answers to be typed in.

This document was created in MS Word. Click on *Choose an item* and click on your answer.

Answer: *True*

To shut down a computer means: Click on *Click or tap here to enter* text and type the answer.

Answer: *To close all open programs and turn off the computer.*

Indicate whether the following statements are true or false.

2.1 The CPU is basically the same as a disk drive.

**Answer:** Choose an item. (1)

2.2 MS Word is a hardware

**Answer:** Choose an item. (1)

2.3 Twitter is an online social networking and blogging service

**Answer:** Choose an item. (1)

2.4 The random-access memory component only stores information when

the computer is switched on.

**Answer**: Choose an item. (1)

2.5 Open source software works with any operating system and

any hardware platform

**Answer**: Choose an item. (1)

2.6 Bluetooth is an example of personal area network

**Answer:** Choose an item. (1)

2.7 In a computer a Trojan Horse is an anti-virus program

**Answer:**. Choose an item. (1)

2.8 Biometrics is used to measure fingerprints and retina scans for security access. **Answer:** Choose an item. (1)

2.9 ICT refers to all the technologies that allow us to work and interact effectively in the modern world.

**Answer:** Choose an item. (1)

2.10 BIOS stands for Biological Internet Operating system.

**Answer:** Choose an item. (1)

2.11 Does the acronym BYOD stand for bring your own device?

**Answer**: Choose an item. (1)

2.12 Is the following e-mail address valid? jenx [kitty@domain.com](mailto:kitty@domain.com)

**Answer**: Choose an item. (1)

2.13 When we break a problem down into smaller parts to make it easier it is called a pattern.

**Answer:** Choose an item. (1)

**QUESTION 3 [13]**

Various options are given as possible answers to the following questions. Answer your question by selecting the letter from the dropdown list.

3.1 The microprocessor was introduced in

A. first generation computers

B. second generation computers

C third generation computers

D. fourth generation computers

**Answer:** Choose an item. (1)

3.2 Which of the following is not an operating system

A DOS

B Oracle

C Linux

D Windows

E. None of these

**Answer:** Choose an item. (1)

* 1. Following performs modulation/demodulation

A fibre optic

B modem

C. satellite

D. coaxial cable

**Answer:** Choose an item. (1)

3.4 The Boolean operators of the Internet are

A. AND, NOT

B. OR, XOR

C. ADJ, AND

D. All of the above.

**Answer**: Choose an item. (1)

3.5 SLIPstands for?

A. Serial Line Protocol

B. Serial Line Internet Protecting

C. Serial Line Interface Protocol

**Answer:** Choose an item. (1)

3.6 Primary memory is used by the

A. Core Memory

B. I/O devices

C. CPU

D. User

**Answer:** Choose an item. (1)

3.7 What is the difference between mnemonic codes and machine codes?

1. There is no difference
2. Machine codes are in binary, mnemonic codes are in shorthand English

C. Machine codes are in shorthand English, mnemonic codes are in binary

D. Machine codes are in shorthand English, mnemonic codes are a high-level language

**Answer:** Choose an item. (1)

3.8 Programs stored in ROM are called

A. hardware

B. software

C. firmware

D. program

**Answer:** Choose an item. (1)

3.9 Which of the following is NOT a file extension used for graphic files

A. .png

B. .gif

C. .toff

D. .jpeg

**Answer:** Choose an item. (1)

3.10 A 32-bit computer would consist of

A. 4 bytes

B. 8 bytes

C. 16 bytes

D. 32 bytes

**Answer:** Choose an item. (1)

3.11 Ergonomics does not involve ………

**A.** Making sure people are in a comfortable position

**B.** Arranging furniture and equipment

**C.** Reducing strain on the human body

**D.** Adjusting the lighting of an area

**Answer:** Choose an item. (1)

3.12 All networks can be the target of an attack, especially those that connect to the Internet. This is why it is important to understand and implement basic network security. Select an option you will look at to use or do to keep the network secure:

1. firewall
2. antivirus software
3. use passwords and usernames where necessary
4. understanding BYOD environments and applying all relevant safety requirements
5. All the above

**Answer:** Choose an item. (1)

3.13 Which one of the following is the correct data type that can store a single character? This includes letters, numbers, and symbols.

A. Real

B. Character

C. String

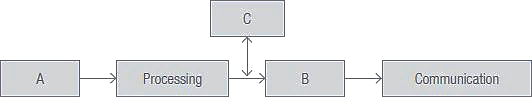
D. Integer

**Answer:** Choose an item. (1)

**QUESTION 4 [29]**

4.1 Answer the following questions by *click or tap.* Type the answer next to the number **Answer**:

Study the diagram below and answer the questions based on the diagram.



Name the missing stages, as indicated by the letters below:

4.1.1 A: **Answer**: Click or tap here to enter text.

4.1.2 B: **Answer:** Click or tap here to enter text. (2)

4.2 Your teacher is busy printing out the term class reports. Which stage is this in the information- processing cycle?

**Answer:** Click or tap here to enter text. (2)

4.3 Choose a concept from COLUMN B that matches a description in COLUMN A. Click or tap and type only the letter in Column A. There can be more than one answer to a question. (6)

|  |  |
| --- | --- |
| **Column A** | **Column B** |
| 1. The structures use to store data Click or tap here to enter text. | 1. Directories 2. Folders   C. Ctrl + X  D. Ctrl + C  E. Recycle bin  F. Extension  G. File path  H. Files and databases |
| 1. To copy a file, use the Click or tap here to enter text. shortcut key on the keyboard |
| 1. Files are stored on a computer inside Click or tap here to enter text. or Click or tap here to enter text. |
| 1. In Microsoft Windows, all deleted files are first moved to the Click or tap here to enter text. |
| 1. The file path always ends with the file Click or tap here to enter text. |
| 1. To move a file, you should use the Click or tap here to enter text. shortcut key on the keyboard |

4.4 The storage devices are listed in Column A. Choose between one of the following data storage methods: Primary, Secondary, Off-line, Tertiary. In Column B click or tap and choose an item next to the storage device. (*Choose an Item*) (7)

|  |  |
| --- | --- |
| **Column A**  **Storage device** | **Column B/**  **Storage method** |
| HDD | Choose an item. |
| RAM | Choose an item. |
| ROM | Choose an item. |
| USB | Choose an item. |
| SSD | Choose an item. |
| DVD-RAM | Choose an item. |
| CLOUD | Choose an item. |

4.5 There are 6 descriptions of a storage device or media in the table below. (6)

Type the answers in the Answer table below the question.

Type the capital letter in **Column B** that goes with the description in **Column A**.

**Example:**

5.1 G.

5.2 K.

|  |  |
| --- | --- |
| **Description** | **Storage device or media** |
| 4.5.1 Non-volatile memory chip, contents of the chip cannot be altered; often used to store the start-up routines in a computer (e.g. the BIOS) | 1. SSD (solid-state drive) |
| 4.5.2 Optical storage media that allows very high storage capacity by using blue/violet lase technology | B ROM |
| 4.5.3 Volatile memory that stores data, programs and the parts of the opening system that are currently in use | C Blue-ray disc |
| 4.5.4 Optical storage media that uses a single spiral track and uses dual layer technology, allowing high data storage capacity | D RAM |
| 4.5.5 Non-volatile memory device that uses NAND flash memories (which consist of millions of transistors wired in series on single circuit boards) | E DVD-RAM |
| 4.5.6 Optical storage media that uses concentric tracks allowing writing and reading to take place at the same time | F DVD-R(+R) |

**Answers:**

|  |  |
| --- | --- |
| 4.5.1 | Choose an item. |
| 4.5.2 | Choose an item. |
| 4.5.3 | Choose an item. |
| 4.5.4 | Choose an item. |
| 4.5.5 | Choose an item. |
| 4.5.6 | Choose an item. |

4.6Complete the table below by indicating in Column B whether the action in Column A is downloading or uploading. Only write Uploading/Downloading next to the number in

Column B. (4)

|  |  |
| --- | --- |
| **Column A** | **Column B Uploading/Downloading** |
| Putting photos on a Facebook wall | 4.6.1 Choose an item. |
| Using a torrent to legally download movies | 4.6.2 Choose an item. |
| Getting music from beemusicplayer | 4.6.3 Choose an item. |
| Getting a PDF document from the Internet | 4.6.4 Choose an item. |

4.7 Write down the missing numbers: (*Answer can be in decimal or binary)*

1 Mb = **Answer**: Click or tap here to enter text..Kb (1)

1 Tb = …**Answer:** Click or tap here to enter text..Mb (1)

**QUESTION 5** **(21)**

Answer the following questions in your own words by clicking the **Text Content Control box** below. ("*Click or tap here to enter text")*

5.1 What is a source code file? Give two examples of a source code file type. (2)

**Answer**:

Click or tap here to enter text.

5.2 Briefly discuss the limitations of fixed Internet access, paying particular attention to the South African context. (2)

**Answer:** Click or tap here to enter text.

5.3 What files can be compressed? (1)

**Answer**:

Click or tap here to enter text.

5.4 Answer the following questions based on the file path below:

C:\My Documents\School\Technology.docx

5.4.1 What is shown in the file path above?

**Answer:** (1)

Click or tap here to enter text.

5.4.2 To what does “C:\” refer?

**Answer:** (1)

Click or tap here to enter text.

5.5 Give four situations where you might encounter computer-based systems in your everyday life

**Answer:**

Click or tap here to enter text. (4)

5.6 Describe in your own what Ergonomics is and how it can improve overall health. (2)

**Answer**:

Click or tap here to enter text.

5.7 Examine the following e-mail carefully and answer the questions that follow: The Homebuyer received the following email with the same address as the Real Estate company.

**From:** ABClittle Co

**Sent:** 14 October 12:15 PM  
**To:** JUnknown12@gmail.com  
**Subject : Deposit required**

Dear Homebuyer

Kindly follow the instructions below and transfer the payment of R200 000.00 due on the house deposit as soon as possible:

Our bank account details are as follows:

ABCIittle Co

Northwest Bank

Account No. 383848484

GREENTOWN

ABCIittle.com

5.7.1 What general name is given to this kind of scam? (1)

**Answer:**

Click or tap here to enter text.

5.7.2 What will happen when you forward the information to the requested email address?

Name three things. (2)

**Answer:**

Click or tap here to enter text.

5.7.3 Motivate why you should check the information on requested payments very carefully. (2)

**Answer:**

Click or tap here to enter text.

**TOTAL SECTION A**

**Section A: Theory Questions 80**

**N5 PAPER 2: SECTION B [120]**

**PRACTICAL**

Answer all the questions in this section using the electronic version of the question paper.

Print your answers as required OR save your answers and share the file with, or send the file to the lecturer.

**QUESTION 6: WORD PROCESSING AND INTEGRATION [17]**

1. Open the file **AIBanking.docx**

2. Save this file as **Quest6Bank yourexamnumber.docx**

3. Edit the document as shown.

4. Delete the strikethrough paragraph.

5. Change the document font type to Times New Roman size 11pt.

6. Add a header with **Your exam number** to the left and **Your student number** the right.

Add a footer with **Page number, centre.**

The page number should start from page **36**.

7. Move the **Cybersecurity** paragraph to the end of the document before **Some tips to avoid being a victim**

8. Add the following Endnote: *“Artificial intelligence (AI) refers to the simulation of human intelligence in machines that are programmed to think like humans and mimic their actions”.*

9. See the document below for further instructions.

Insert the picture **AI Block.jpg** to display next to the heading on the right. Resize the picture and use text wrapping to display the text to the left of the picture.

10. Save the document regularly.

Paragraph in 1½ line spacing

What is the future in banking? bold, font size 16pt

By 2030, banks will be invisible, connected, insights-driven and purposeful. run on paragraph

~~By 2030, banks will be: Invisible.~~ Leading banks will use technology and far deeper customer insight to insert financial services at the customer's moment of need, often at the expense of brand visibility.

≠

In the new “What's going on in Banking 2020” study, the top five technologies are:

Convert the text to table format and resize the columns

≠

1) Accounts Digital account opening;

2) Payments P2P payments;

3) VoIP Video collaboration/ marketing;

4) Platform Cloud computing; and

5) APIs Application programming interfaces

≠

Cybersecurity

Cyber-threats have had a big impact on the financial services industry and implicates a particular vulnerability to identity theft, fraud, espoinage and money laundering. Data breaches and IT crashes have become increasingly common in banks and prove very costly. When a cyberatack hits a financial institution’s online banking services, the

average costs are $1.8 million. Significantly, the biggest losses have been distributed among smaller companies, due to less investment in IT security.

~~new2000 is the technologically advanced Computer Banking Solution that brings the future of business banking in South Africa to your office. Computer payments to all creditors and employees, at any financial institution. There are considerable savings on service fee charges by using computer payment methods. Payments can be captured to be released 60 days into the future. Multiple debit and credit payments can be uploaded via new2000.~~

Add an Endnote after Artificial Intelligence

Artificial Intelligence is the future of banking as it brings the power of advanced data analytics to combat froudulent transactions and improve compliance. AI algorithm accomplishes anti-money laundering activities in few seconds, which otherwise take hours and days. Here’s a look at the how banking technology will change data sharing and the way your money is handled.

Blockchain Technology change to bold text and 14pt

≠

insert line numbers for this paragraph only − starting from 19

Blockchain technology is set to fundamentally transform banking and financial services. It decentralizes financial management from a central authority to a widespread network of computers. Financial transactions are broken down into encrypted packets, or “blocks,” which are then added to the “chain” of computer code and encrypted for enhanced cybersecurity. Because the technology has the potential to improve numerous facets of banking it’s no longer a question of if blockchain will change the banking industry, but when.

≠

What are the disadvantages of AI? change to bold text and 14pt

≠

High cost of implementation. Setting up AI-based machines, computers, etc.

Cannot replace humans. It is beyond any doubt that machines perform much more efficiently as compared to a human being.

Change to a bullet list, delete the underlining. Align on the left margin

does not improve with experience.

lacks creativity.

risk of unemployment.

≠

Insert the paragraph in a text box, resize to 11cm width 1.6 cm height and thick border 4 ½ pt, shadow, font size 10 pt. (colour of your choice) as shown below.

World Economic Forum surveys people every year about the biggest problems facing the world. Climate change is the millennial generation's top concern for the third year in a row.

The cloud change to bold text and 14 pt

≠

It is clear that the public cloud will eventually become the dominant infrastructure model, as cloud-based computing is only just getting started. Many financial institutions use cloud-based software-as-a-service (SaaS) applications for their business processes, which might be seen as non-core, such as CRM, HR, and financial accounting.

≠

*Some tips to avoid being a victim*change to bold text and 14 pt

Make sure that your cellphone is connected to your network so you receive notices of transactions from Discovery Bank.

If you get an OTP on your phone and you are not transacting, call your bank immediately.

re-arrange paragraphs in alphabetical order and create a numbered list.

Monitor your account activities through your bank app (check balances and recent purchases).

Your bank will never ask you to confirm your confidential information over the phone, by email or by SMS.

Do not give your card details (card number, the CVV code on the back of the card, expiry date, name on card) to anyone.

Never give confidential information like your ID number, physical address, cellphone number and email address to people who contact you who cannot prove their identity.

**QUESTION 7: Word processing Mail merge [18]**

The manager of the company, **GreenTravel** asks you to send the following letters to clients who requested flight information. Use the mail merge function to assist you with your task.

**QUESTION 7A (4)**

1. Use the mail merge function to create a data file using the names and information in the table below.
2. Save the document as **QUEST7A your examnumber.docx**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **LETTER 1** | **LETTER 2** | **LETTER 3** |
| **Name** | Mr Z Radebe | Ms Viola Lungi | Mr K Ndola |
| **Address** | 35 McGyver Street | 9th Boulevard | 101 Main Road |
| **City** | DIKGALE | LAPALALE | DURBAN |
| **Code** | 0722 | 5200 | 3100 |
| **Manager** | Nozi Duminy | Edwin Thobeka | Peter Riddle |
| **Date** | 2021-05-19 | 2021-06-01 | 2021-05-26 |

**QUESTION 7B (11)**

1. Use the mail merge function to prepare the letters for the clients (primary document). Use the font type Times New Roman and font size 12.

2. Insert a header: your examination number in the top left, and QUEST 7B top right of page.

3. Insert fields where indicated in brackets, for example [NAME].

4. Use a left margin of 3.75 cm/1.5".

5. Save the document as **QUEST 7B yourexamnumber.docx**

6. Make a printout of this document; use portrait orientation.

GREEN TRAVEL COMPANY Bold, size 18, font Cambria, centre

Website: www.greentravel.com Private Bag X029

E-mail: green\_world@telkom.net CAPE TOWN

≠

*Insert today's date in full*

≠

[Address]

[City]

[Code]

≠

Dear [Name]

≠

Flight: Johannesburg to Cape Town bold, underline, centre

≠

Your e-mail dated [Date] refers to the information regarding the cheapest flights as requested.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Date of Flight: 12 October 202? Insert this year merge cells | | | | |
| Airline | Flight | Price | Depart from OR Tambo | Arrival Time  Amsterdam |
| Emirates | ER | R8750 | 22:45 | 09:15 |
| British Airways | BA | R9100 | 21:45 | 08:15 |
| KLM | KLM | R7950 | 09:45 | 20:30 |

align price right centre times

≠

Should you require more information, please do not hesitate to contact [Manager], the manager of the branch.

Yours sincerely

MANAGEMENT AND STAFF

**QUESTION 7C (3)**

1. Merge the documents QUEST 7A and QUEST 7B into a new document.

2. Change the header to QUESTION 7C on all the pages of the new document.

3. Print the merged letters and save as **QUEST 7C yourexamnumber.docx**

**SECTION B**

**QUESTION 8: Spreadsheets [40]**

**QUESTION 8A (20)**

You have been appointed as the Management Accountant of the GreenEarth Company. As the accountant, you are required to present a report on budget variances to management at the next meeting.

1. Open the existing spreadsheet **QUESTION 8A.xlsx**. (**Note:** It consist of **three** worksheets)

2. Save the workbook as **QUEST8A Yourexamnumber.xlsx**

3. Make a copy of the Template worksheet and rename the sheet to **GreenEarth.**

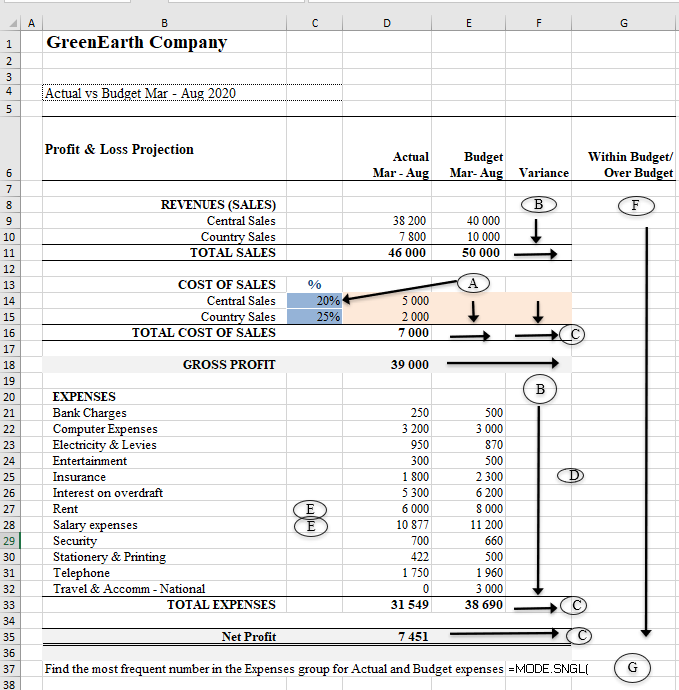
4. Insert the header to QUESTION8A, right-aligned and insert your Examination number to the left.

5. Merge & Centre the second heading across the worksheet.

6. Enter the heading Budget/Over Budget in cell F5.

7. Edit the spreadsheet according to the instructions indicated in the text on the following page.

8. Follow the instructions to insert formulas to do the calculations, as follows:



9. Do the calculations: (Take note to copy the formula down)

1. Cost of Sales (cell E14) = Budget Mar-Aug \* Central Sales 20%
2. Calculate the Variances = Actual Budget Mar/Aug – Budget Mar/Aug (copy down to Expenses)
3. Gross Profit = Total Sales – Total Cost of Sales
4. Format Column F to show negative values in red.

E. **Actual** salary as % = of total expenses

**Budget** Rent as % = of total expenses

F. Use an IF function to indicate the items that are “Within Budget” or “Over Budget”

Insert the formula in cell F9 and copy down to G35.

G. Find the most frequent number in G37

**QUESTION 8B (12)**

1. In the workbook in Question 8A, click on the existing worksheet, titled **GreenGraph** and link the Actual, Budget and Variance values from QUEST8A.

|  |  |  |  |
| --- | --- | --- | --- |
| **Cash Flow** | **Actual** | **Budget** | **Variance** |
| Total Income | 0 | 0 | 0 |
| Cost of Sales | 0 | 0 | 0 |
| Total Expenses | 0 | 0 | 0 |
| **Total Cash** | **0** | **0** | **0** |

1. Create a bar chart between Actual & Budget to show the Cash Flow. Incorporating the values that you have linked from QUEST8A worksheet. (Select A1:C5)

4. Do the following:

Add chart Title and Axis titles.

Add Legend at the bottom of chart

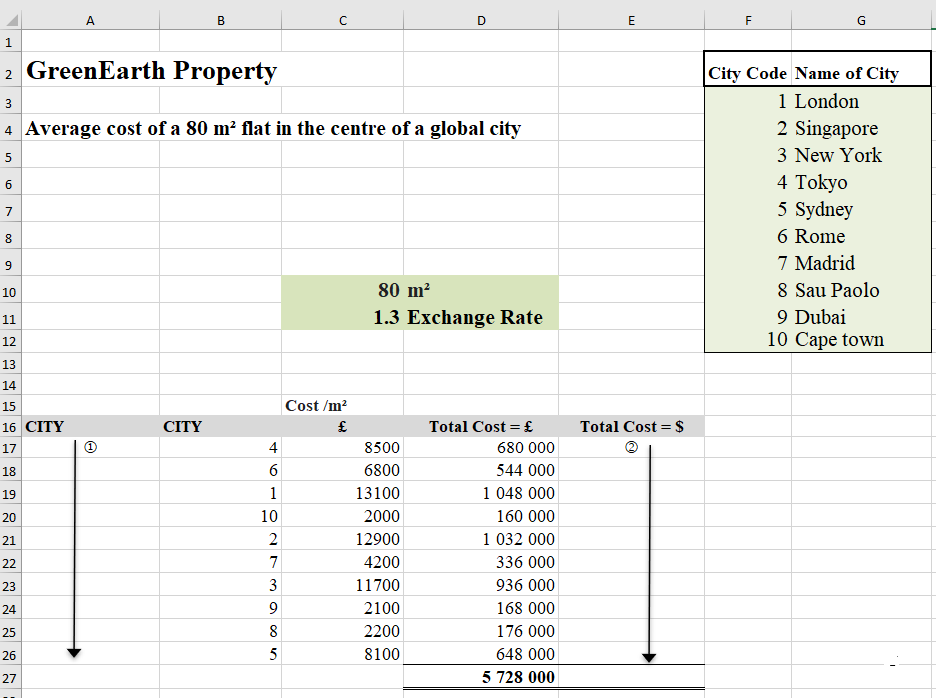
Font Style: Times New Roman, Bold, size 9

Switch rows and columns (2 charts on the worksheet)

1. Save the workbook as **QUEST8B Yourexamnumber.xlsx**

**QUESTION 8C (8)**

1. As the Financial Manager of GreenEarth Property Company calculate the cost per square metre in $. The conversion rate of the Dollar to Pound Sterling is currently **£**0.77 = $1.00
2. In the workbook Question 8A click on the worksheet **GreenEarth** and do the calculations:



* Look up the name of the city in Column G3:G12 and H:H12.

② Calculate the price per square metre (m²) in $

Cost per square m = Cost /m² \* 80 m²

Target cost = the formula above times the Exchange rate.

3. Sort the table in ascending order

4. Create a column chart by selecting the range A17:A26 and D17:D26

Add chart tile and Font style to Calibri 14, Bold

Choose any New element style for Chart Tile

1. Save the workbook as **QUEST8C Yourexamnumber.xlsx**

**QUESTION 9: OneNote [15]**

1. Create a new notebook named **Yourexamnumber Question 9** on your PC.

2. This notebook contains important notes about our Management of the GreenEarth Company. Add sections and pages as follows (see the screenshots below):

2.1 Add two sections and name them:

General Meeting tab colour in red

Charity Events tab colour in blue

2.2 Add 3 pages to the Planning section and name them:

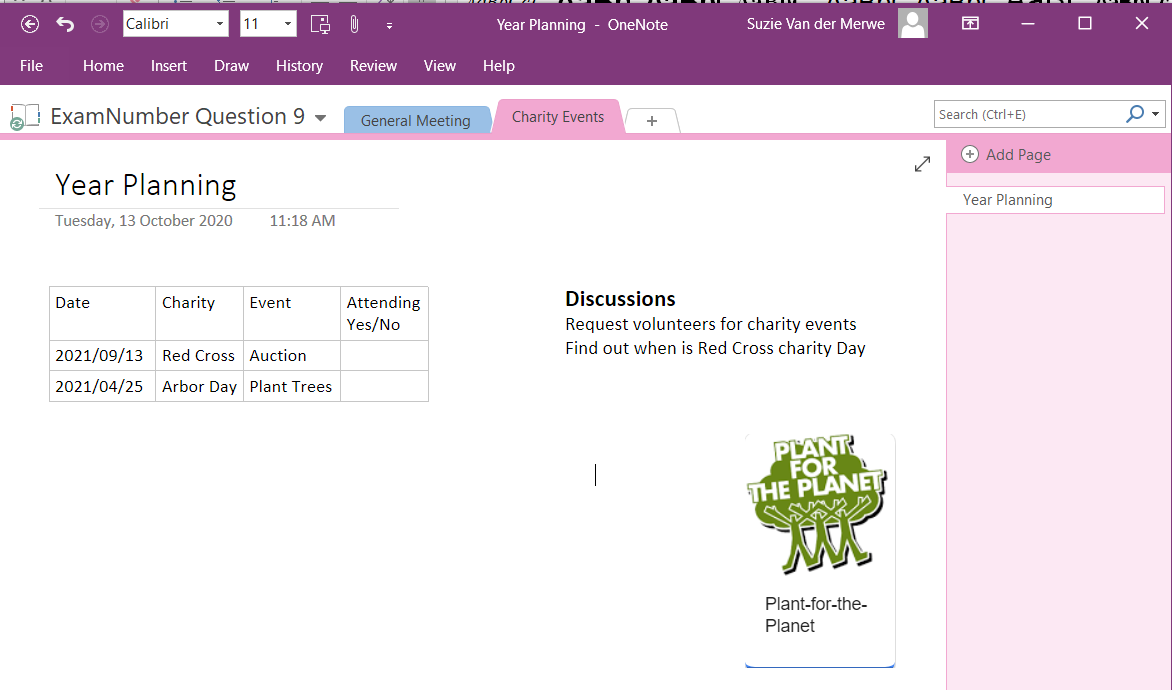
Directors Meeting

Financial Results

Charities

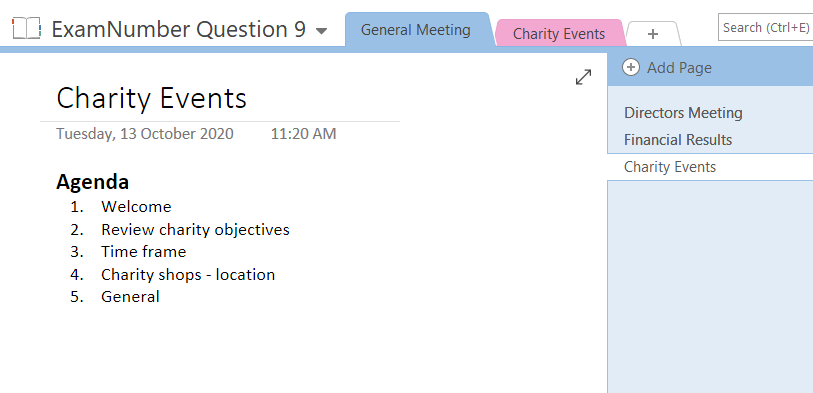
2.3 Add 1 page to the Charity Events section:

Year Planning



3. Insert a table for the two charities and a note for Discussions. See above

4. Insert the image called Plant Trees resize and move to the right below discussions note.



5. In the General Meeting section create a numbered list

Format the text and move the table below the heading.

6. Open the Excel worksheet answer file completed in QUEST8B called **GreenPlanting**.

Copy and paste the & chart on the page Financial Results.

Close the Excel file.

7. In the Charity Events section, the Year Planning page select the Discussion note to attach the Word file, TREE DAY.