



GAUTENG PROVINCE
EDUCATION
REPUBLIC OF SOUTH AFRICA

PREPARATORY EXAM 2015
COMMON EXAM
GRADE 12
QUESTION PAPER

SUBJECT	:	CAT PAPER 1
TIME	:	3 HOURS
MARKS	:	180

**This question paper consists of 15 pages,
an HTML Tag Sheet and an Information Sheet.**

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. Type your name and surname in the header of EVERY document that you create or save.
3. The invigilator will give you a CD/DVD containing all the files needed for the examination OR you will be told where the files can be found on the network or computer. If a CD/DVD has been issued to you, you must write your name and surname on the CD/DVD. If you are working on the network, you must follow the instructions provided by the invigilator.
4. A copy of the master files will be available from the invigilator. Should there be any problems with a file, you may request another copy from the invigilator.
5. This question paper consists of SEVEN questions.
6. Answer ALL the questions.
7. 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.
8. Read through each question before answering or solving the problem. Do NOT do more than is required by the question.
9. At the end of the examination you must hand in the CD/DVD given to you by the invigilator with ALL your answer files saved onto the CD/DVD, OR you should make sure that ALL the answer files are saved on the network/computer as explained to you by the invigilator/educator. Make absolutely sure that all files can be read. Do NOT save unnecessary files/folders and do NOT hand in duplicate answer files/folders.
10. The information sheet that has been provided with the question paper **MUST BE COMPLETED AFTER THE THREE-HOUR EXAMINATION SESSION**. Hand it to the invigilator at the end of the examination.
11. 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.
12. Unless instructed otherwise, formulae and/or functions must be used for ALL calculations in questions involving spreadsheets. Use absolute cell references only where necessary to ensure that formulae are correct when you copy them to other cells in a spreadsheet.
13. All functions/formulae should be inserted in such a way that the calculation will still yield the correct answer even if the data changes.

14. If data is derived from a previous question that you cannot answer, you should still proceed with the questions that follow.
15. In all questions involving word processing, you should set the language to English (South Africa). The paper size is assumed to be A4 Portrait, unless instructed otherwise.
16. Use centimetres as the unit of measurement when answering this question paper unless the instruction indicates otherwise.
17. Generally, one mark is allocated per action; therefore a 2-mark question would require TWO actions, etcetera.
18. The examination folder/CD/DVD that you receive with this question paper will contain the folders and files listed below. Ensure that you have all the files before you begin with this examination.

• 1Comp_Rek	Word processing file
• 2Internet	Word processing file
• 3Use_Gebruik	Spreadsheet file
• 4Danger_Gevaar	Image file
• 4Virus	Spreadsheet file
• 5Dell	Image file
• 5Price_Prys	Database file
• 6Comp_Rek	HTML file
• 6Type_Tipe	Image file
• 7Facts_Feite	Word processing file
• 7Graph_Grafiek	Spreadsheet file
• 7Merge_Saamvoeg	Word processing file
• 7Sale_Verkoop	Database file
• 7Sales_Verkope	Word processing file
• 7Text_Teks	Text document

SCENARIO

In the current world, it's almost impossible to imagine that someone can live without computers. Computers have become an electronic device of almost every day use for individuals of all ages.



You were asked to prepare some documents regarding the elements of computers.

QUESTION 1 – WORD PROCESSING

A document was created to give background on the history of computers.

Open the **1Comp_Rek** word processing document and insert your name and surname in the header.

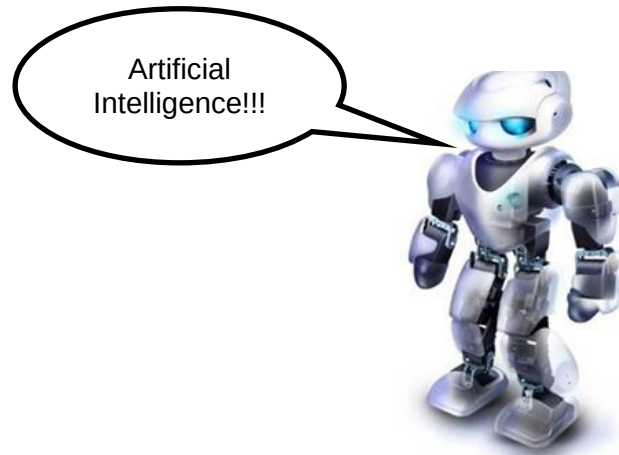
- 1.1 This document needs a cover page. Follow the instructions below to add a cover page:
- 1.1.1 Insert the 'Grid' cover page as the first page of the document. (1)
- 1.1.2 Add the following information:
Document title: 'History of Computer Development'.

Move the web address from the last page of this document to the abstract content control. (2)
- 1.2 Insert an automatic table of contents after the text 'Table of Contents' by using the 'Main' and 'Heading 4' styles. (2)
- 1.3 Add automatic page numbering in the footer of the document as follows:

Page numbering should start on the page after the table of contents and should display as 'Page 1'. (4)
- 1.4 Locate the image next to the 'Computer Introduction' paragraph and add an automatic caption to the image that reads: 'Figure 1: Desktop Computer'. (1)
- 1.5 Find and replace all the occurrences of the whole word 'computer' with the word '**computer**' formatted in bold. (2)
- 1.6 Insert an automatic citation at the end of the 'Introduction' paragraph as follows:
 - Type of source: Journal Article
 - Author: Jones and Smith
 - Year: 2010 (3)
- 1.7 Locate the paragraph that starts with 'Actually speaking...' and ends with '... as ABACUS' and ensure that it will stay together when a part is moved to the next page. (1)
- 1.8 Insert a comment to the word 'Abacus' below the heading 'Development of the computer' with the following information: 'Known as the Suanpan'. (2)
- 1.9 Locate the word 'Pascal's' below the 'Pascal's calculator' picture and insert a footnote with the following information: ' $1^{\text{Pa}} = 1^{\text{N}}$ '. (3)
- 1.10 Correct all the spelling errors that occur in the document. (1)

1.11 Add a callout shape next to the image towards the last page as follows:

- The image should resemble the one below with a size of 7 cm width and 10 cm height.
- Ensure that the image can be moved as one object.



(5)

1.12 Insert a text watermark that reads: 'History of Computers'.

Change the direction to horizontal.

(2)

Save and close the **1Comp_Rek** document.

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QUESTION 2 – WORD PROCESSING

You were asked to create a guide with information regarding the Internet.

Open the **2Internet** word processing document and insert your name and surname in the header.

- 2.1 Add the title: 'Internet and The World' using any WordArt style to the top of the first page.
Apply any shadow effect to the WordArt. (2)
- 2.2 Locate the list towards the top of the first page and change the bullet to  (Webdings, character code 252).
Change the line spacing to multiple 1.15. (2)
- 2.3 Change the paragraphs that start with 'Thirty years ago...' and ends with '...Internet began.' to appear in two columns as follows:
- There should be a line between.
 - Spacing of 2 cm should appear between the columns. (3)
- 2.4 Accept all the reviewing changes made to the document. (1)
- 2.5 Locate the table below the heading 'Internet users'.
- 2.5.1 Ensure that the table AND the heading 'Internet users' appear on a portrait page.
The rest of the document should remain on landscape. (3)
- 2.5.2 Format the table with the 'Plain Table 1' style. (1)
- 2.6 Locate the heading 'Personal internet usage' and change the following:
- 2.6.1 Change the properties of the 'Name' text form field to accept a maximum of 20 characters. (1)
- 2.6.2 Insert a drop-down form field next to the text 'Internet Usage'.
Include the following options as a drop-down list for the field:
- Every day
 - Once a week
 - Once a month
- Add the following help text to the status bar: 'Choose one'. (3)
- 2.6.3 Add a check box form field before the text 'Cable' so that people can choose between 'Wifi' and 'Cable'. (1)
- 2.6.4 Make use of a word processing feature to ensure that the 'Name' form field is aligned with the 'Surname' and 'Internet Usage' form fields. (2)

Save and close the **2Internet** document.

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QUESTION 3 – SPREADSHEET

The internet usage for workers and their departments are stored in the **3Use_Gebruik** spreadsheet.

Unless instructed otherwise, formulae and/or functions must be used for ALL calculations in questions involving spreadsheets. Use absolute cell references only where necessary to ensure that formulae are correct when you copy them to other cells in a spreadsheet.

Open the **3Use_Gebruik** spreadsheet and work in the **Depart** worksheet. Insert your name and surname in the header of the document.

3.1 Merge **cells A1:H1** AND add a heading that reads 'Internet usage per department'. (2)

3.2 The workers need a password to log onto their system.

This password is made up of the following:

- the number of characters of their department;
- the last three letters of the worker's name in capital letters; and
- the text '@work'

Insert a function in **cell C4** to determine the password of the first worker. (5)

3.3 Insert a calculation in **column F** to determine the number of full years a worker has been working in the department.

Make use of the date in **cell A2**.

Ensure that the calculation is copied to the rest of the column. (5)

3.4 Use an appropriate spreadsheet feature that would change the highest 10 internet usage numbers in **column G** to appear shaded in red. (3)

3.5 Use an appropriate function in **column H** to calculate the status of each worker's internet usage (**column G**). The status is displayed as follows:

- 0 to 99 – Low
 - 100 to 199 – Moderate
 - 200 or more – High
- (4)

3.6 Insert a function in **cell K4** to calculate the number of workers. (2)

Work in the **Use** worksheet.

3.7 Insert a function in **cell B1** to calculate the total number of times the Internet was used by the advertising department. (4)

Save and close the **3Use_Gebruik** spreadsheet. [25]

QUESTION 4 – SPREADSHEET

The **4Virus** spreadsheet contains the names of some existing viruses.

Unless instructed otherwise, formulae and/or functions must be used for ALL calculations in questions involving spreadsheets. Use absolute cell references only where necessary to ensure that formulae are correct when you copy them to other cells in a spreadsheet.

Open the **4Virus** spreadsheet and work in the **Virus** worksheet. Insert your name and surname in the header of the document.

4.1 Rename the 'Virus' sheet to 'Level'. (1)

4.2 Levels of viruses are determined as follows:

Damage	Level
Very High	Dangerous
High Medium Low Very Low	Manageable

For example: If the damage in the **Status** worksheet shows 'Very High', the level will display as 'Dangerous', otherwise the level will display as 'Manageable'.

Use the VLOOKUP function in **cell B4** to determine the level of the virus in **column A**.

HINT: You may use the VLOOKUP function in combination with another function. (7)

4.3 Use a combination of functions in **cell C5** to remove the first part of the virus name in **column A** to determine the type of virus.

NOTE: The virus name appears before the first full stop. (4)

4.4 Use a spreadsheet feature that will allow a user to print only from **cells A3:B111**.

Ensure that all the data will fit on one sheet.

NOTE: DO NOT PRINT. (2)

Work in the **Totals_Totale** worksheet.

4.5 Use a function in **cell B2** to calculate the total number of very high damages in the **Status** worksheet. (3)

4.6 Create an appropriate graph/chart that will display the percentage of the damages that viruses could cause.

Use the data in **cells A2:B6**.

- Add an appropriate graph/chart title above the graph/chart that refers to the function/purpose of the graph/chart.
- Display the percentage for each damage on the graph/chart.
- Fill the damage that has the highest percentage with the **4Damage_Gevaar** image.
- Display the graph/chart in a new worksheet called **Chart**. (6)

Work in the **Spread_Versprei** worksheet.

4.7 Use any appropriate method to determine the number of viruses that have the word 'exploit' in the name AND have a medium spreading.

Enter the answer in **cell F1**.

NOTE: Show the steps in the calculation to earn part-marks. (3)

4.8 Link **cell F1** to the **Status** worksheet. (1)

Save and close the **4Virus** spreadsheet. [27]

QUESTION 5 – DATABASE

A database that contains the prices of computers and computer components was created.

Open the **5Price_Prys** database.

5.1 Open the **Data** table and make the following changes:

5.1.1 Change the data types for the fields with descriptions to more appropriate data types. (3)

5.1.2 Set a primary key to the most appropriate field. (1)

5.1.3 Change the field size of the *Type* field to 20. (1)

5.1.4 Add an appropriate feature that will allow the *Stock Code* field to accept data entered in the following way:

- 4 capital letters;
- 2 numbers.

e.g. ADKN85. (4)

5.1.5 Add a validation rule to the *Price* field to accept products above R2 000 and below R20 000.

Add an appropriate message to guide the user. (4)

Save and close the **Data** table.

5.2 Create a query called **qry5_2** based on the **Data** table.

Ensure that the query appears like the example below.

Type	Make	Model	Stock Code	HDD	Stock
Notebooks	Acer	Acer E1	E1-571-I5	500GB	☒
Notebooks	Acer	Acer E1 17.3"	ACER TMP276-MG-7760G1T	1TB	☒
Notebooks	Acer	Acer E1 Touch	E1-572P-54206G75	750GB	☒
Notebooks	Acer	Acer E1 Touch	E1-572P-54206G75	750GB	☒
Notebooks	Acer	Acer V5	V5-123-12102G32	320GB	☒
Notebooks	Dell	Inspiron 3542	N3542-I74510U-81PRO	1TB	☒

Save and close the **qry5_2** query. (5)

5.3 Open the **qry5_3** query.

Modify the query to display a list of all the screens as follows:

- Where the *Price* field ranges from R5 000 to R11 000 AND the screen size is 15.6".
- Display only the *Type*, *Model*, *Screen size*, *Stock* and *Price* fields. Remove the unnecessary fields.

Save and close the **qry5_3** query. (4)

5.4 Open the **qry5_4** query.

Add a calculated field called *Price VAT incl* and calculate the price of the product if VAT was included.

Ensure that the answer is displayed in rand format.

NOTE: VAT is calculated at 14%.

(5)

Save and close the **qry5_4** query.

5.5 Open the **frm5_5** form.

Modify the form as follows:

- Change the heading to 'Types of Notebooks' and display it in a red colour.
- Add a combo box to the *Make* field. It must allow the user to choose from the following options:

Acer, Asus, Dell, HP, Lenovo, MSI, Samsung

- Add the **5Dell** image to the header of the form.

(5)

Save and close the **frm5_5** form.

5.6 Create a report called **rppt5_6** based on the **Data** table.

- Display only the *Type*, *Stock Code*, *Model* and *Price* fields.
- Group the records according to the *Type* field.
- Use a function to display the number of different types of products at the bottom of the group.
- Add a calculation to determine the total amount that the products are worth.

Save and close the **rppt5_6** report.

(8)

Close the **5Price_Prys** database.

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QUESTION 6 – WEB DESIGN (HTML)

A web page was created to explain the different types of computers.

Open the incomplete **6Comp_Rek** webpage in a web browser and also in a text editor.

NOTE:

- Question numbers are inserted as comments in the coding as guidelines to show approximately where the answer/s should be inserted.
- You have been supplied with an HTML tag reference sheet as a reference.

Your final webpage should look like the example below:

Types of Computers

A **desktop** computer is a *personal computer* in a form intended for regular use at a single location desk/table due to its size and power requirements, as opposed to a laptop whose rechargeable battery and compact dimensions allow it to be regularly carried and used in different locations.

A **laptop** or a notebook is a portable personal computer with a clamshell form factor, suitable for mobile use. There was a difference between laptops and notebooks in the past, but nowadays it has gradually died away. Laptops are commonly used in a variety of settings, including at work, in education, and for personal multimedia.

A **tablet** computer is a mobile computer with a touchscreen display, circuitry and battery in a single unit. Tablets come equipped with sensors, including cameras, a microphone and an accelerometer, and the touchscreen display uses finger or stylus gestures substituting for the use of computer mouse and keyboard.



Approximate prices

	Desktop	Laptop	Tablet
Price	R3,999	R6,999	R4,999

Alternative Prices

1. Hi-Fi Connections
2. Game Corporation
3. Incredible Stores

- 6.1 Add the title: 'Computers' to appear on the tab of the browser. (2)
- 6.2 Change the attribute of the font type so that it displays the font correctly. (1)
- 6.3 Add a horizontal line that appears in red after the heading. (2)
- 6.4 Format the words 'personal computer' to appear in italics. (1)
- 6.5 The image tag should display the **6Type_Tipe** picture stored in your data folder.
- Correct the code for the image to display correctly.
 - Add a border of 10 around the image. (3)
- 6.6 Edit the table as follows:
- Change the table to two rows and four columns.
 - The headings should be in the first row with grey shading.
 - The 'Price' heading and prices should appear in the second row.
- Ensure that the table resembles the example on the previous page. (4)
- 6.7 Add a link at the bottom of the table that links to www.pricecheck.co.za.
- The link should display the text 'Alternative Prices'. (3)
- 6.8 Add the following list at the bottom of the webpage:
- 1. Hi-Fi Connections**
 - 2. Game Corporation**
 - 3. Incredible Stores**
- (4)
- Save and close the **6Comp_Rek** webpage. [20]

QUESTION 7 – GENERAL

You were asked to finalise certain documents.

- 7.1 Change the title property of the **7Facts_Feite** file to 'Facts'. (1)
- 7.2 Open the **7Facts_Feite** word processing document.
- 7.2.1 Save the image above the text 'Figure 1: Currency of the World' as **7Money.jpg** in your data folder. (2)
- 7.2.2 Insert the information found in the **7Text_Teks** file below the heading '6-10 Interesting Facts About Computers'.
The font should match the rest of the document. (2)
- 7.2.3 Save the file as a *pdf* file called **7Facts_Feite**. (1)
- Save and close the **7Facts_Feite** document.
- 7.3 Open the **7Graph_Grafiek** spreadsheet.
- 7.3.1 Select the correct data for the graph. (1)
- 7.3.2 Change the data series for the profit to a line graph. (1)
- Save the **7Graph_Grafiek** file, but keep it open.
- 7.4 Open the **7Sales_Verkope** word processing document.
- 7.4.1 Add the current date and time in the header so that it updates automatically. (2)
- 7.4.2 Paste the chart from **7Graph_Grafiek** spreadsheet in the space provided below the first line.
Ensure that the graph will automatically be updated if data in the spreadsheet changes. (2)
- 7.5 Use the data from the **Sales** worksheet in the **7Graph_Grafiek** spreadsheet and import it to a new table in the **7Sales_Verkope** database.
Name the table **Sales**. (2)

7.6 You need to create certificates for some individuals.

Open the **7Merge_Saamvoeg** file.

- Use the **Sales** worksheet from the **7Graph_Grafiek** spreadsheet as the data source.
- Insert the *Name*, *Sales* and *Commission* fields in the spaces provided.
- Select only those who sold more than 100 products.
- Sort the records in ascending order according to the names.
- Save the **7Merge_Saamvoeg** document before completing the merge.
- Complete the merge and save the new document as **7MComplete**. (6)

Save and close all the documents.

[20]

TOTAL: 180

HTML TAG SHEET

Basic Tags	
Tag	Description
<body></body>	Defines the body of the web page
<body bgcolor="pink">	Sets the background colour of the web page
<body text="black">	Sets the colour of the body text
<head></head>	Contains information about the document
<html></html>	Creates an HTML document – starts and ends a web page
<title></title>	Defines a title for the document
<!-- -->	Comment
Text Tags	
Tag	Description
	Creates the largest heading
	Creates the smallest heading
	Creates bold text
<i></i>	Creates italic text
	Sets size of font, from "1" to "7"
	Sets font colour
	Sets font type
Links Tags	
Tag	Description
	Creates a hyperlink
	Creates an image link
	Creates a target location
	Links to a target location created somewhere else in the document
Formatting Tags	
Tag	Description
	Creates a new paragraph
<p align="left">	Aligns a paragraph to the "left" (default), can also be "right", or "center"
 	Inserts a line break
	Creates a numbered list
<ol type="A","a","I","i","1">	Defines the type of numbering used
	Creates a bulleted list
<ul type="disc","square","circle">	Defines the type of bullets used

Formatting Tags continued	
Tag	Description
	Inserted before each list item, and adds a number or symbol depending upon the type of list selected
	Adds an image
	Aligns an image: can also be "right", "center", "bottom", "top", "middle"
	Sets size of border around an image
	Sets the height and width of an image
	Displays alternative text when the mouse hovers over the image or when the image is not found
	Inserts a horizontal line
<hr size="3"/>	Sets size (height) of line
<hr width="80%"/>	Sets width of line, in percentage or absolute value
<hr color="ff0000"/>	Sets the colour of the line
Table Tags	
Tag	Description
<table></table>	Creates a table
<tr></tr>	Creates a row in a table
<td></td>	Creates a cell in a table
<th></th>	Creates a table header (a cell with bold, centred text)
<table width="50">	Sets the width of the table
<table border="1">	Sets the width of the border around the table cells
<table cellpadding="1">	Sets the space between the table cells
<table cellspacing="1">	Sets the space between a cell border and its contents
<tr align="left">	Sets the alignment for cell(s) (can also be "center" or "right")
<tr valign="top">	Sets the vertical alignment for cell(s) (can also be "middle" or "bottom")
<td colspan="2">	Sets the number of columns a cell should span
<td rowspan="4">	Sets the number of rows a cell should span

COMPUTER APPLICATIONS TECHNOLOGY PAPER 1 PREPARATORY EXAM 2015**INFORMATION SHEET** (to be completed by the candidate AFTER the 3-hour session)**180**

SCHOOL _____

NAME AND SURNAME _____

WORK STATION NUMBER _____

SUITE USED
(Mark appropriate
box with a cross (X))Microsoft Office
2013Microsoft Office
2010Microsoft Office
2007

FOLDER NAME _____

Question Number	File name/s	Saved (✓)	Done (✓)	Maximum Mark	Mark Achieved	Marker Initial/code
1				29		
2				19		
3				25		
4				27		
5				40		
6				20		
7				20		
Total				180		

Comment (for office/marker use only)
