



Province of the
EASTERN CAPE
EDUCATION

**NATIONAL
SENIOR CERTIFICATE**

GRADE 12

SEPTEMBER 2015

COMPUTER APPLICATIONS TECHNOLOGY P1

MARKS: 180

TIME: 3 hours



This question paper consists of 19 pages, including annexures.

INSTRUCTIONS AND INFORMATION

1. Due 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. Enter your examination 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 your work is 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 you accidentally corrupt the files given to you, you may request further copies from the invigilator.
5. Make sure that you save each document using the file names given. 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 what is required by the question.
7. At the end of the examination you must hand in the disk given to you by the invigilator with all the answers saved on the disk or make sure that all the files have been saved on the network as explained to you by the invigilator/educator. Ensure that ALL files can be read.
8. Note that NO printing is required.
9. During the examination you may use the help functions of the programs which you are using. You may NOT use any other resource material.
10. Note that if data is derived from a previous question that you cannot answer, you should still proceed with the questions that follow.
11. Formulas and/or functions must be used for ALL calculations in questions involving spreadsheets, unless otherwise specified. *Absolute cell references* must only be used where necessary to ensure that formulas are correct when they are copied to other cells in the spreadsheet.
12. In ALL questions involving word processing, the language should be set to *English (South African)* and the paper size is assumed to be *A4 portrait*, unless otherwise instructed.
13. All measuring units should be set to *centimetres*.
14. This question paper consists of *seven* questions. Answer ALL the questions.

NOTE:

The data disk that you receive with this question paper contains the folder and the files listed below. Ensure that you have ALL these files before you begin this examination.

A folder called **EXAM DATA** with files and a sub-folder called:

- | | |
|-------------------------------|----------------------|
| • Q7MyFile | Folder |
| • 1Chart.jpg | Image |
| • Images6.jpg | Image |
| • Q1Newsletter_Nuusbrief | Word processing file |
| • Q2SubjectChoice_Vakkeuse | Word processing file |
| • Q3Staff_Personeel | Spreadsheet file |
| • Q4Marks_Punte | Spreadsheet file |
| • Q5Tablet database_databasis | Database file |
| • Q6_Logo.jpg | Image |
| • Q6_Techno.html | HTML file |
| • Q7Answersheet_Antwoordblad | Word processing file |
| • Q7SubjetChoice_Vakkeuse | Word processing file |
| • Tablets-v-textbooks.jpg | Image |

SCENARIO

In 1922 Thomas Edison reportedly said:

I believe that the motion picture is destined to revolutionise [transform] our education system and that in a few years it will supplant the use of textbooks ... The education of the future, as I see it, will be conducted through the medium of the motion picture where it should be possible to obtain 100 percent efficiency.

Tablets will not transform education:

“What a bold statement,” “particularly in view of the current proliferation of tablets and other mobile devices.”



Most South African schools are currently researching the use of tablets instead of textbooks in schools. You are requested by your school principal to assist with the drafting of letters and questionnaires to parents.

QUESTION 1

A newsletter must go out to the parents to inform them about the schools research regarding this issue. Make use of your expertise in applying word processing attributes and features to produce a professional document.

Open the document **Q1Newsletter_Nuusbrief**.

- 1.1 Set the top-and-bottom margins to 1,5 cm. (1)
- 1.2 Locate the paragraph that starts with: ‘During the AGM and ...’ under the paragraph heading “The cost saving”. Apply the following formatting:
 - 1.2.1 Change the formatting of the subheading, “The cost saving” to Garamond 13 pt. (2)
 - 1.2.2 Apply line spacing of exactly 14 pt to the text under the heading ‘The cost saving’. (2)
 - 1.2.3 Locate the list of preloaded resources under the heading ‘Resource Library’. Apply bullets to the list using the image **tablets-vs-textbooks.jpg** which can be found in your exam folder as the bullet symbol. (2)
- 1.3 Replace all the occurrences of the word ‘TRAIN YOUR BRAIN’ with ‘TYB’ in a bright green font colour. (2)

- 1.4 The text from 'MIB Technology' (shaded in yellow) to '... low, fixed cost' must be placed in columns as follows:
- The text must appear in three columns with a line between each column. (2)
 - The space between the columns must be exactly 1 cm. (1)
 - The text of all the three columns must be fully justified. (1)
- 1.5 Apply styles to the document as follows.
- 1.5.1 Create a new paragraph style called **Lets go digital** based on the **Heading 1** style. Modify the new style as follows: (2)
- The text should be surrounded by a shadowed border. (1)
 - The paragraph spacing should be set to 2,5 pt after the heading. (1)
- 1.5.2 Apply the **Lets go digital** style to the heading, 'How it all works'. (1)
- 1.6 Insert an automatic table of contents on a new page at the beginning of the document. Add the heading 'TABLE OF CONTENTS' and format the table of contents as follows:
- The table of contents must show the style **Lets go digital** as the *first* level, **Heading 1** as the *second* level and **Heading 2** as the *third* level as shown below:
- | | |
|--|---|
| TABLE OF CONTENTS | |
| Public school goes 100% digital e-books | 1 |
| Striving excellence | 1 |
| The companies that made it happen..... | 2 |
| How it all works – the techno details | 2 |
| Resource Library: | 2 |
| Communication: | 3 |
- Use the Distinctive format. (5)
 - Tab leaders should display. (5)
- 1.7 Insert the image **1Chart** as a watermark in the document. Set the scale of the watermark to 150%. (2)


- 1.8 Add automatic page numbering to the document as follows:
- Place the page numbers in the page footer.
 - Ensure that even page numbers appear right-aligned in the footer and that odd page numbers appear left-aligned in the footer.
 - Start page numbering on the first page of the document. Start numbering from 10 onwards. (5)
- 1.9 Locate the text '31 March 2001' at the top of the document.
- Ensure that the entire date (31 March 2001) remain together on the same line, and not become separated over two lines. (2)
- 1.10
- Expand the character spacing of the text 'Striving excellence' on the first page by 3 pt. (1)
 - Right align the text. (1)
 - Format the text to capital letters. (1)
- Save **Q1Newsletter_Verslag** and close the document. [35]

QUESTION 2

Open the word processing file **Q2SubjectChoice_Vakkeuse**.

Type your Name and Surname in the header of the document.

The school created a form to assist in capturing the learners' subject choice details. Look at the example below and follow the instructions to complete the form to be ready for use.

SUBJECT CHOICES  VAKKEUSE

Name/Naam:

Surname/Van:

Gender: ☐ MALE
 ☐ FEMALE

Cell#/Sel#

--	--	--	--	--	--	--	--

Mathematics/Mathematical Literacy ☐
*(Must have 50% in Grade 9 Mathematics)

SUBJECT GROUPS

GROUP 1

 Life Sciences
 History
 Physical Sciences


GROUP 2

Accounting

GROUP 3


 Physical Sciences
 Business studies
 Tourism

Signature/Handtekening: _____



Pls. return by 30 October 2015

I, _____ parent of _____ a grade 9 learner hereby acknowledge receipt of the important letter regarding my child's subject choices for grade 10.

- 2.1 Remove the hyperlink from the text 'SUBJECT GROUPS'. (1)
- 2.2 Insert the Wingdings symbol  (Microsoft Office: character code 255) between the text 'Subject Choices' and 'Vakkeuse'. (1)
- 2.3 Use paragraph borders to place a line above and below the heading on the first line of the form as shown. (2)

- 2.4 Locate the Drop-Down Form Field underneath the 'Group 2' text and add the following options:
- Accounting
Geography
Business Studies (1)
- 2.5 Insert a check box form field next to the option 'Mathematics/Mathematical Literacy'. The check box must be placed on 8 cm next to the option. Use a tab setting to align the check box at 8 cm. (2)
- 2.6 Change the properties of the form field used to enter the surname so that a maximum of 10 characters can be entered. (1)
- 2.7 Add a table to the document next to the appropriate field/text to allow the cell number of the learner to be added:
- It must consist of 10 columns.
 - The width of the columns must be set to 'autofit to contents'.
 - The row height must be set to exactly 0.8 cm. (3)
- 2.8 Set and apply a 5 cm dotted leader tab to provide space for the signature of the learner underneath the text 'Signature'. (2)
- 2.9 Restrict any changes to the document with the password 'Help', but you must still be able to fill in the form. (2)
- Save **Q2SubjectChoice_Vakkeuse** and close the document. [15]

QUESTION 3

A local school have saved the personal details of their educators in a spreadsheet.

Open the spreadsheet **Q3Staff_Personeel** and work in the **Educators** worksheet.

3.1 Merge **cells A1:-P1** and centre the contents horizontally across the new merged cell. (1)

3.2 Change the fill colour of the above-mentioned range to any green colour. (1)

3.3 Change the text alignment of the headings in **cells A3-P3** to a 90 degree angle. (1)

3.4 Change the date format in **cell F12** so that it displays in the following format: eg. 20-Jan-80. (1)

3.5 Each staff member has been assigned a code, for example 101Y*JOH.

Insert a function/formula in **column D** (starting in **cell D4**) to determine a staff code for each staff member. The staff code consists of the following:

- The number in **column A**
- The last letter of the name in **column B** followed by an asterisk (*)
- The first three letters of the surname in **column C**
- The code must display in capital letters.

3.6 **Columns H-J** contains types of devices that are used by educators daily.

3.6.1 Add a function in **cell H22** to determine how many educators use laptops. (2)

3.6.2 Add a function in **cell H23** to determine how many educators use laptops and smartphones. (1)

3.7 Educators sometimes get recognition for the number of years spend teaching.

Add a formula to **cell K4** to calculate the number of years this educator rendered his service to education using their starting date in **cell G4** and the **Today's Date**. Format the number of years so that no decimal places are shown. (5)

3.8 The educators will receive certificates for their years in service at the Education Department. Educators who have more than 30 years' service, will receive "Gold" certificates, those with more than 20 years' service, "Silver" certificates and those less than 20 years' service, no certificates.

Add an IF statement to **cell L4** to display what type of certificate this educator will receive. Fill the function down to the rest of the educators. (4)

- 3.9 In **cell C22**, use a function to calculate the total number of characters in the surname found in **cell C16**. (2)
- 3.10 Use a function in **cell M22** to determine how many educators do not do sports as an extra mural activity. (Make sure the answer does not display any decimal places.) (2)
- 3.11 The school receive some cash donations and do fundraisers that contribute towards the educator fund which is used to pay educators for extra mural activities during the year. Educators who qualify receive R120 per hour spent during these activities.
- Add a formula in **cell O9** to calculate how much Mrs. Samson will receive for her time spent on cricket coaching. (Your answer should display in rands.) (3)
- 3.12 Add a function in **cell O22** to determine the amount due on only the female staff during the term for extra mural activities. (4)

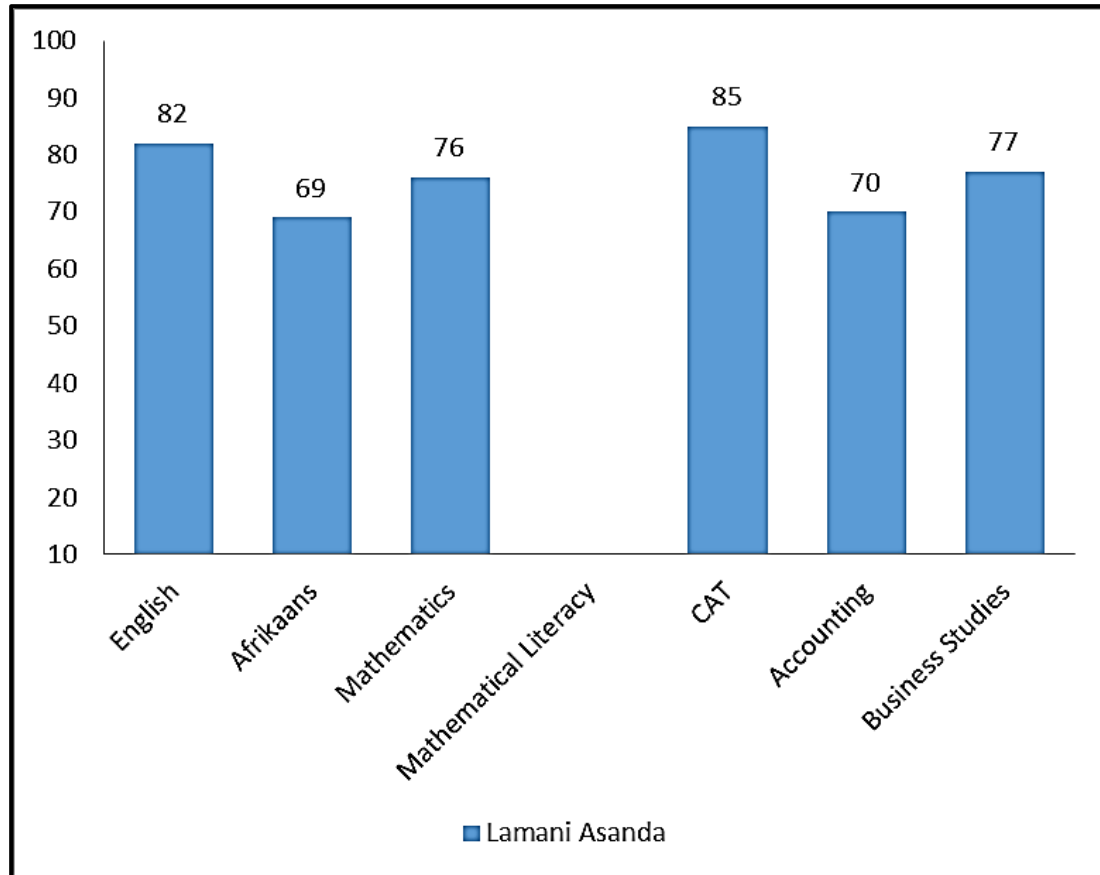
Work in the Sheet 1 worksheet.

- 3.13 A supplier of the schools textbooks AYوبا BOOKS have created a spreadsheet in order to quickly generate an invoice for parents.
- The framework for the invoice is saved in **Sheet 1**. Rename this worksheet as **Invoice**. (1)
- 3.14 The ISBN numbers, titles of the books and prices are saved in the **Costs_Lookup** worksheet.
- Add a VLOOKUP function in **cell C20** on the Invoice worksheet to display the correct title for the books.
- Copy the function to rest of the cells. (6)
- 3.15 Add the current date as a function to **cell D15**. The date must update automatically. (1)
- Save and close the **Q3Staff_Personeel** spreadsheet. [42]

QUESTION 4

The Grade 12 class teacher would like to create a graph/chart to display the top learner's marks.

Open the spreadsheet **Q4Marks_Punte** and work in the **Report** worksheet.



Use the information below to insert a column chart in the worksheet.

(1)

Note the following:

- Use the highlighted data/marks for Lamani Asanda to create the chart. (Do not show the total.) (1)
- Data labels must be displayed in the centre of each series. (1)
- Display the legend at the bottom and rename it as Lamani Asandi. (2)
- Change the minimum value of the vertical axis to 10 and the maximum value to 100. (2)
- Once completed, move the graph to the **Graphs** sheet. (1)

Save and close **Q4Marks_Punte** document.

[8]

QUESTION 5

The data collected during the research has been captured in a database. Help the educator to edit the data where necessary so that it can provide useful information.

Open the database **Q5Tablet database-databasis**.

5.1 Work in the **Q5Tabs** table:

- 5.1.1 Move the **Name of tab** field to be the first field in the table and add a Primary key to it. (2)
- 5.1.2 Assign a suitable data type to the **DatePurchased** field. (1)
- 5.1.3 Insert a field called **Operating system**. (1)
 - Place the field directly after the **Screen size** field. (1)
 - Set the data type to be able to hold a picture. (1)
- 5.1.4 Change the Field Properties of the **Review** field as follows:
 - The field size to 'Double'.
 - The decimal places must be set to ONE decimal place. (2)
- 5.1.5 In the **Available colours** field use a drop-down list to capture the following colours Black, White, Grey and Red. Restrict the field to only accept the inserted colours. (2)
- 5.1.6 Add an input mask to the ID Code field to only accept SIX characters in the following format: TWO uppercase letters followed by an underscore (_), followed by THREE digits, for example CT_202 (2)
- 5.1.7 Tablet makes are found in the **Name of tab** field. The name of the tablet called 'google' is spelled incorrect.

Identify this record and correct the spelling. (1)

- 5.2 Research is being done by the CAT teacher on tablet specifications and performance.

Open the **Q5Favourite_Gunsteling** table.

Most tablets use Android operating systems from version 2 to version 4.2.

Create a query called **Q5Androids** to display all the tablets that are using any version of the Android operating system. (2)

- 5.3 Open the query **Device Info**.

- Modify the query so that it display all the devices of which the Current Value exceeds R10 000. (1)
- Display only the following fields: 'Name of tab', 'Storage', 'Screen size' and 'Current Value'. (1)
- Sort the query by 'screen size' in ascending order. (1)

Save the query as **Q5Modified** and close. (1)

- 5.4 Open the **Q5Tabs Query**.

A deposit of 20 percent is required for each purchase. Add a calculated field that will calculate and show the 20 percent deposit that is required for each purchase. Name the new field 'Deposit'. (4)

- 5.5 Open the form called **Q5Signals_Seine** which is based on the **Q5Favourite_Gunsteling** table and make the following changes to the form:

5.5.1 Remove the **Operating system** field as it is no longer needed. (1)

5.5.2 Add the date as a field in the footer of the form. (2)

5.5.3 The **Connectivity_Konneksie** field does not appear on the current form. Add a list box for the **Connectivity_Konneksie** field which include the following options: *Wi-Fi*, *3G* and *LTE*. A suitable label must be added to the list box. (4)

Format the label to match the other labels on the form. (1)

- 5.6 Open the **Q5Favourite_Gunsteling** report and make the following changes:
- 5.6.1 Change the paper size of the report to letter. (1)
 - 5.6.2 Display the page number at the bottom of the report. Make sure that the format is page N of M and is positioned on the right side of the report. (3)
 - 5.6.3 Insert the date next to the heading in the Report Header. (1)
 - 5.6.4 Add a suitable function with a suitable label to calculate and display the total number of tablets. (3)
 - 5.6.5 Change the font colour of the heading in the Report Header to a blue font colour. (1)
- Save and close **Q5 tablet database**. [40]

QUESTION 6

You need to assist the person who started the webpage to complete it. Your duty is to edit the layout of the webpage so that it is readable.

Open the file **Q6_Techno.html** and carry out the instructions below. Use the application program **Notepad** to edit the web page.

You may use the **HTML Tag Sheet** provided for this question.

- 6.1 Insert the title of the webpage: "Tablets on wheels". (1)
- 6.2 Correct the image tag so that the image displays properly. Make sure that the picture is displayed on the right hand side. Set the image height and width to 100. (4)
- 6.3 Change the paragraph tag in "Contact Details" so that it becomes a level 1 heading. (1)
- 6.4 The heading "Address" should be in bold. (1)
- 6.5 Use an appropriate tag to format the font of the heading "Directions" to Algerian. Change the font colour to red. (3)
- 6.6 Place the names under the heading "Names of tablets" in an unordered list with square bullets. (4)
- 6.7 A table has been created but it does not display correctly. Use appropriate tags to correctly place all the shipment information in the table. The table should look as follows: (3)

Shipped in	Standard	Economy	Post Office
3 - 5 working days	13 Dec	11 Dec	13 Dec

Edit the table as follows:

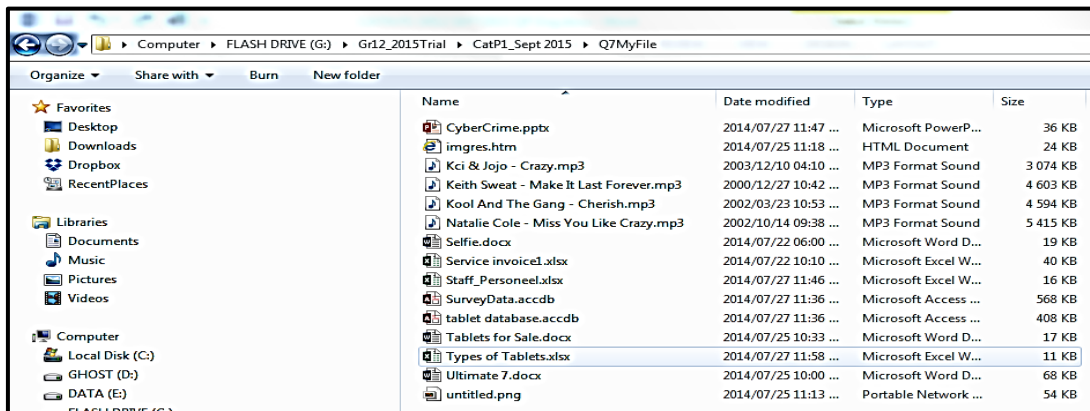
- 6.7.1 Change the thickness of the border to 5. (1)
- 6.7.2 The spacing between the cell borders and the text should be 8. (1)
- 6.8 Use the image "**Tablets-v-textbooks.jpg**" to create a hyperlink to the word "e-Books" below the table. (3)

Save and close **Q6_Techno.html**.

[22]

QUESTION 7

Your educator created a folder called **Q7MyFile** and need help with organising of the files and folders.



Add your Name and Surname in the header of the **Q7Answersheet_Antwoordblad**

- 7.1 Create a subfolder called **Music** in the **Q7MyFile** folder. (1)
- 7.2 Move all the MP3 files into this **Music** subfolder. (1)
- 7.3 Find the smallest file in the **Q7MyFile** folder. Enter your answer in the **Q7Answersheet_Antwoordblad**. (1)
- 7.4 Protect the file **Selfie** with the password #Self12 in order for the file to be opened. (2)
- 7.5 Convert the **Tablets for sale** file to a **pdf** file and remove the original file. (2)
- 7.6 Open the spreadsheet file **Staff_Personeel**. Copy the chart to the **Q7Answersheet_Antwoordblad** and make sure it can update if any changes are made to the chart. (2)
- 7.7 Compress the **Ultimate 7** file and rename it **Q7Compress**. (2)
- 7.8 Sort the files and folders in the **Q7MyFile** folder according to size (from the largest to the smallest). Take a screenshot of sorted files and folders and paste it in the space provided in the **Q7Answersheet_Antwoordblad**. (2)
- 7.9 Change the File Properties of the file **Q7Answersheet_Antwoordblad** by entering your name under *Author*. (1)

- 7.10 The **Q7SubjectChoice_Vakkeuse** letter must be posted to the parents of Sannie du Plessis in grade 9. They could not attend the information evening.

Create an envelope in the **Q7SubjectChoice_Vakkeuse** document and use the information as shown in the example below:

The Principal
Hellen High School
P.O. Box 909
Pretoria
0001

Mr & Mrs du Plessis
101 Ninon Court
Sunnyside
0002

SUBJECT CHOICES VAKKEUSE

Name/Naam: Surname/Van:

Gender: ☐ MALE ☐ FEMALE

Delivery Address:

Mr & Mrs du Plessis
101 Ninon Court
Sunnyside
0002

The return address to be used:

The Principal
Hellen High School
P.O. Box 909
Pretoria
0001

Save the changes and close the file.

(4)
[18]

TOTAL: 180

Basic Tags		Formatting	
Tag	Description	Tag	Description
<body></body>	Defines the body of the webpage	<p></p>	Creates a new paragraph
<body bgcolor="pink">	Sets the background color of the web page	<p align="left">	Aligns a paragraph to the left (default), can also be right, or center
<body text="black">	Sets the colour of the body text	 	Inserts a line break
<head></head>	Contains information about the document		Creates a numbered list
<html></html>	Creates an HTML document - starts and end a web page	<ol type="A", "a", "I", "I", "1">	Defines the type of numbering used
<title></title>	Defines a title for the document		Creates a bulleted list
<!-- -->	Comment	<ul type="disc", "square", "circle">	Defines the type of bullets used
Text Tags			
Tag	Description	<imgsrc="name">	Adds an image
<h1></h1>	Creates the largest heading		Aligns an image: can be left, right, center; bottom, top, middle
<h6></h6>	Creates the smallest heading		Sets size of border around an image
	Creates bold text		Sets the height and width of an image
<i></i>	Creates italic text		Displays alternative text when the mouse hovers over the image
	Sets size of font, from 1 to 7	<hr/>	Inserts a horizontal line
	Sets font color	<hr size="3"/>	Sets size (height) of line
	Sets font type	<hr width="80%"/>	Sets width of line, in percentage or absolute value

Links			Tables	
Tag	Description		Tag	Description
<code></code>	Creates a hyperlink		<code><table></table></code>	Creates a table
<code></code>	Creates an image link		<code><tr></tr></code>	Creates a row in a table
<code></code>	Creates a target location		<code><td></td></code>	Creates a cell in a table
<code></code>	Links to a target location created somewhere else in the document		<code><th></th></code>	Creates a table header (a cell with common bold, centered text)
			<code><table border="1"></code>	Sets the width of the border around the table cells
			<code><table cellspacing="1"></code>	Sets the space between the table cells
			<code><table cellpadding="1"></code>	Sets the space between a cell's border and its contents
			<code><table width="50"></code>	Sets width of table
			<code><tr align="left"></code>	Sets alignment for cell(s) (left, can also be center, or right)
			<code><tr valign="top"></code>	Sets vertical alignment for cell(s) (top, can also be middle, or bottom)
			<code><td colspan="2"></code>	Sets number of columns a cell should span