Computer Applications Technology

Study Opportunities

Grade 11

June 2013

Paper 1 Practical

Time: 2½ hours   *Marks: 150*

This paper consist of 11 pages (title page included)

Instructions and information

1. Note that you will not be allowed to leave the examination venue before the end of the examination period.

2. Save your work at regular intervals.

3. Read through each question before answering or solving the problem. Do not do more than is required by the question.

4. Note that no printing is required.

5. 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.

6. Note that if data is derived from a previous question that you cannot answer, you should still proceed with the questions that follow.

7. 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!

Please note:

You will receive together with the question paper an examination folder called **DATA ReadingProjects**, which contains the following files:

Documents library
DATA ReadingProjects

- 1Planning
- 2EntryForm
- 3BookClub
- 4Booklist
- 5ActiveReaders
- 5AktieweLesers
- Book_Picture
- ClubSite
- DRM_CaseStudy
- In books I find
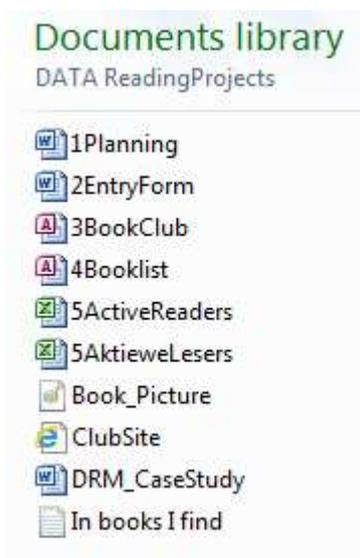
This folder will be referred to as your *exam folder*.

Theme: Promoting a Reading Culture

The English and Computer departments of Misty Hills High School have decided to promote reading in general – books, e-books, information on the Web, etc. – just as long as one starts reading! A steering committee was formed and different projects will be held.

Question 1

Misty Hills High School has decided to host a Book Festival which will be attended by learners from neighbouring towns. The local schools with hostels have offered to host learners from other towns.

Open the file **1Planning** which contains some of the initial planning for the festival.

1.1 Move the text *Draft Planning Document* from the beginning of the document to the *header*. Right-align the text in the header.

   Insert the date (in the format 6 June 2013) as a *left-aligned field* in the header. (5)

1.2 Format the quotation from Stephen King as follows:

   "Books are a uniquely portable magic." — Stephen King

   Note the following:
   - Paragraph borders must be used.
   - Only the top and bottom paragraph borders are displayed.
   - Border thickness – 'Width' = 2¼ pt.
   - The paragraph is shaded in a colour of your choice. (3)

1.3 Format the following heading with *Heading 1* style: *Introduction* (1)

1.4 Paragraph: *Committees*
   - Change the yellow shaded section to a bulleted list.
     Use the bullet that looks like an 'open book' (Wingdings, character code 38: 🕮). (2)
   - Insert the file **DRM_CaseStudy** as a linked object below the last bullet. The file must be displayed as an icon and linked to the original file. (3)
   - Locate the proposed agenda (in blue text). Use a multilevel list or outline numbering to renumber the items on the proposed agenda as follows: (4)

   Proposed agenda for first meeting:
   1) Welcome
   2) Election of Steering Committee
   3) Urgent Items
      a) Dates
      b) Finance
         i) Costs
         ii) Sponsorship
   4) General
   5) Date of next meeting

1.5 Modify the style *Heading 2* as follows:

- Font: 14 pt, bold, any dark blue colour
- Paragraph spacing: 6 pt After (4)

1.6 Insert automatic page numbering in the footer as follows:

- The numbers must be in the format Page X of Y.
- Odd page numbers must be displayed right-aligned, and even page numbers left-aligned. (4)

1.7 Locate the paragraphs headed *Programme Committee*, *Publicity and Entertainment Committee* and *Transport Committee.*

Place this text (including the headings) in two columns as follows:

- There must be a line between the columns.
- The first column must be 8.0 cm wide and the second one 8.5 cm wide.
- The sentence starting '*Schools and libraries can assist …*' should appear at the top of the second column without making use of the Enter key. (5)

1.8 Paragraph: *Hospitality Committee*

Use tab stops to format the red text as follows:

SCHOOL.......................... ABLE TO ACCOMMODATE

Crystal Waters High 26

HS Denville 110

Misty Hills High...100

Trinder Park High..30

Note the following:

- The headings in the first line are formatted with the *Small Caps* font effect.
- The heading 'Able to accommodate' and the numbers are right-aligned at 7.5 cm, with dotted tab leaders. (4)

1.9 Perform a spelling check on the document, ensuring that the words have been spelled correctly in South African English. (2)

1.10 Replace all occurrences of '/' with ' or '. (E.g. 'speakers/authors' must be changed to 'speakers or authors'.) (2)

Save and close the document. **[39]**

Question 2

It has been decided to start a book club, and at the same time to launch a competition.

Open the document **2EntryForm**.

2.1 A Drop-Down List appears to the right of the entry *Gender*. Add the items 'F' and 'M' to the Drop-Down List. (1)

2.2 Add a Check Box Content Control in place of the 'X' next to *Library*. (1)

2.3 Add the option *Helping with reading skills* as the second last option for the Drop-Down List for the *Help* entry. (2)

Do **not** lock or restrict editing of the document.

2.4 The bottom section of the page serves as an entry form for a competition.

Locate the **>>** just above the table of books. Replace the **>>** with the contents of the text file **In books I find.txt**. The formatting of the destination paragraph (>>) must be used, and *not* the formatting of the original text in the text file. (2)

2.5 Carry out the following editing:

The table just with the Grade 8 and 9 books must start at the top of page 2.
The text in the header for this page (only) must read 'Grade 8 and 9'.

A separate table with the Grade 10 to 12 books must start at the top of page 3.
The text in the header for (just) pages 3 and 4 must read 'Grade 10 to 12'.

Where necessary the header row of the table must be repeated. (5)

Save and close the document. **[11]**

Question 3

A database has been created which contains data on all members of the book club.

Open the database **3BookClub**, and the table **Members**.

3.1 Change the gridlines settings so that only the vertical gridlines are displayed. (1)

3.2 Change the row height of the records to 15 units. (1)

3.3 Left-align the values stored in the *Name* field and widen the column so that all the names are fully visible. (2)

3.4 Set the *Number* field as the primary key. (1)

3.5 Swop the order of the *Surname* and *Name* fields without deleting any data. (2)

3.6 Change the *Gender* field to the most appropriate field size.
Ignore any warning messages that might appear. (1)

3.7   Add a new field called *Photo*, that will be used to physically store a photo of each book club member. The new field must be positioned directly after the *Gender* field.   (3)

3.8   Change the data type of *AccessToLibrary* to a more appropriate type.
        Ignore any warning messages that might appear.   (1)

3.9   Change the data of Shalane De Kock as follows:

        • AccessToLibrary: Yes

        • HelpWhere: Reading skills   (2)

3.10   Remove the record of Jennifer Nel.   (1)

3.11   Sort the records on the *Number* field.   (1)

Save the table and close the database.   **[16]**

Question 4

The English teacher has received a number of book donations, which she plans to use in building up a mini-library.

Open the database **4Booklist**. You will see that it contains one table called **Books**, and one query called **Readathon**. Open the table **Books**. The *Grade* field gives an indication of the school grade for which each book is recommended.

4.1   The English teacher needs a list of all the books, sorted in ascending alphabetical order by *Author* and then by *Title*.
        Create the necessary query based on the **Books** table, displaying only the fields *Author* and *Title*, in that order.
        Save the query with the name **Shelf Positions**.   (4)

4.2   The junior grade teachers have requested a list of all the books in good condition (i.e. **not** in need of repair) that have been recommended for learners in Grades 8 and 9.
        Create the necessary query, displaying only the fields *Title*, *Author* and *Grade*.
        Save the query with the name **Junior Books**.   (4)

4.3   A decision has been made to write off all books that are in poor condition (i.e. in need of repair) that are valued at R50 or less.
        Create a query to identify these books. Display all the fields.
        Save the query with the name **Audit**.   (3)

4.4 A senior 'Readathon' is being organised around the following authors in the mini-library: *Dianne Hofmeyr*, *Jenny Robson* and *Lutz Van Dijk*. All books written by these authors that have been recommended to *Grades 10 and higher* will be used.

The query **Readathon** has been created to list the following fields of these books: *Title*, *Author* and *Grade*. However, this query only shows books by Dianne Hofmeyr, and no book recommendations for Grade 10 are included.

Open the query and correct it to display the required books.

Save and close the query **Readathon**. (3)

4.5 Create an *Access* **Form** that can be used to enter details of books into the **Books** table in a user-friendly way. The alignment and positioning of the various objects and fields must be similar to the following example: (10)

The following aspects of the form are important:

- The default label (form title) and background shading have been removed from the Header section.

- The field *SerNo* has been moved to the Header section, and its label changed to *Book Number.*

- The fields *NeedRepair* and *Value* have been moved to the right of the other fields in the Detail section.

- The instruction *(Check if 'yes')* has been added below the field *NeedRepair*, and formatted in italics.

- A solid rectangle encloses the three fields *Title*, *Author* and *Grade*.

- The image **Book_Picture** (supplied in your exam folder) has been added to the Header section.

Save the form with the name **Input**.

Close the database. [24]

Question 5

It has been decided to award the most active readers in the school a prize each term. The details of the learners who have accepted the challenge are stored in a spreadsheet.

Open the spreadsheet **5ActiveReaders**. Work in the **Names** worksheet.

5.1 Use the Auto Fill option to assign each learner a number in column A, starting from 1 onwards. (1)

5.2 Change the formatting of the column headings in cells K3:O3 so that they are displayed as follows: (Pay attention to the relative row and column heights) (3)

Books outstanding 2nd term	Total	Amount	Lucky Number	Book Gift

5.3 Merge and centre cells A1:E1. (1)

5.4 Use conditional formatting in column J to highlight the number of books of all learners who read *more than 13 books* in June. (2)

5.5 A number of learners still have books outstanding (column K). The fine per book is R10 which is shown in cell M1. Use absolute cell references, and add formulas in column M, to determine the amount which each learner owes. (3)

5.6 There is going to be a lucky draw. Add functions in column N to assign each learner a random number between 1 and the number of learners. You must use a function to determine the number of learners. (4)

5.7 Members of the book club, as indicated by 'Yes' in column E, are going to receive a book as a gift.

Use suitable functions in column O to display the word "Gift" if the learner is due to receive a book, otherwise leave the cell blank. (4)

5.8 Add formulas or functions as needed at the bottom of the spreadsheet:

5.8.1 Cell D82: The highest total number of books read by a learner from April to June as shown in column L. (2)

5.8.2 Cell D83: The second highest total number of books read by a learner from April to June as shown in column L. (3)

5.8.3 Cell D84: The average total number of books read by a learner from April to June.
Use a function to round off the number to 1 decimal place. (4)

5.8.4 Cell D85: The number of learners who do <u>not</u> belong to the book club. (2)

5.8.5 Cell C89: The total number of learners in Grade 8. (3)

5.8.6 Cell C96: The total number of books that were read by Grade 8 learners in the second term (April to June, column L). (4)

5.9 An attempt was made to create a chart that shows what percentage each grade forms of the total number of readers. The chart appears in the **Names** worksheet.

- Change the chart to a suitable type.
- Display the percentages as well as the category names (Grades) on the chart.
- Remove the legend.
- Move the chart to appear in a new worksheet (in the same spreadsheet) called **Chart Grades.** (6)

5.10 It has been recommended that *Keshia De Jager* tries to read more books each month.

Create a line chart (as shown below) in the **Names** worksheet to show how many books she read in each month (February to June).

Take note of the following:
- The title.
- The Y-axis title.
- The values on the X-axis.
- There are no gridlines or legend.
- The values (Data labels) appear on the chart, formatted in a 14 point font. (8)
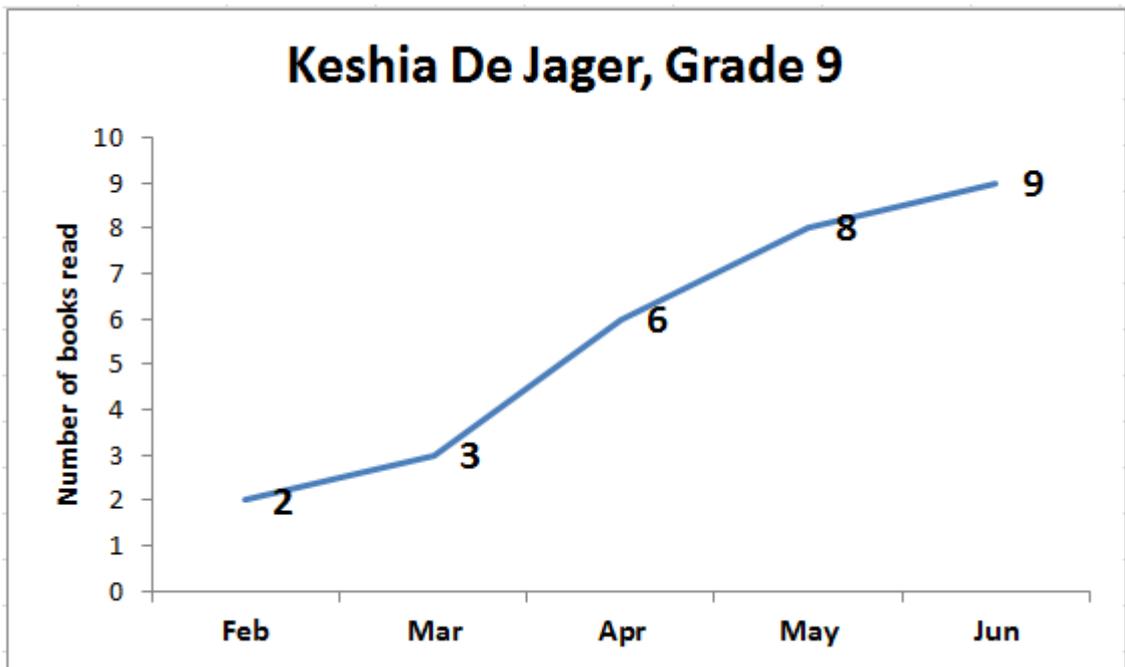
Save and close the spreadsheet. [50]

Question 6

Some Grade 11 members of the Misty Hills High School Book Club also take CAT as a subject. They are keen to put their newly learned html skills to use by creating a web page for the club. The web page will be linked to the school's website.

Open the file **ClubSite.html** in a text editor and make the following changes:

6.1   The learners made some mistakes when they created the page. Some of the closing tags are missing.

Correct the mistakes.   (2)

6.2   Change the HTML code so that the title 'Misty Hills High School Book Club' will be displayed in the tab and/or title bar of your browser, as in the following screenshot: (2)
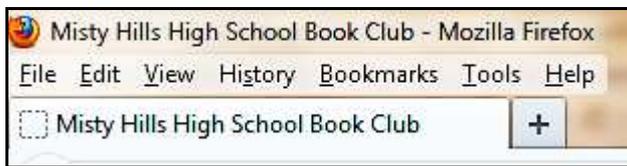
6.3   Add a level 1 heading at the top of the body section of the page, with the text 'Misty Hills High School Book Club'.   (2)

6.4   Add a tag to draw a horizontal line across the page, immediately below the heading added in 6.3 (or where you would have added the heading if you could not do question 6.3).   (1)

6.5   The text starting with 'On this page…' in the first paragraph should be on the next line, but without starting a new paragraph. Add a tag to do this.   (1)

6.6   Add tags to format the text 'Misty Hills High School Book Club' in the first paragraph in bold.   (1)

6.7   Add tags to display the date and time of the next club meeting (in the second paragraph) in italics.   (1)

Check your answers by previewing the web page in a browser.

Save and close ClubSite.   **[10]**

TOTAL : 150

Appendix A: HTML Tag List

Opening tag	Closing tag
Basic document tags	
<html>	</html>
<head>	</head>
<title>	</title>
<body>	</body
Heading element	
<h1>	</h1>
<h2>	</h2>
<h3>	</h3>
…	…
<h6>	</h6>
Text elements	
<p>	</p>
<hr />	
Text formatting	
	
<i>	</i>