



higher education & training

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

N290(E)(N12)H

NATIONAL CERTIFICATE

DATA MANAGEMENT: FARMING N4

(4090454)

12 November 2018 (X-Paper)

09:00–12:00

This question paper consists of 12 pages.

DEPARTMENT OF HIGHER EDUCATION AND TRAINING
REPUBLIC OF SOUTH AFRICA
NATIONAL CERTIFICATE
DATA MANAGEMENT: FARMING N4
TIME: 3 HOURS
MARKS: 200

INSTRUCTIONS AND INFORMATION

1. This paper consists of TWO sections:

SECTION A: THEORY
SECTION B: PRACTICAL
 2. SECTION B is done in the COMPUTER ROOM. EXAMINATION NUMBER which is hand written in SECTION B is not acceptable.
 3. Answer ALL the questions.
 4. Read ALL the questions carefully.
 5. Number the answers according to the numbering system used in this question paper.
 6. Write neatly and legibly.
-

SECTION A**QUESTION 1**

- 1.1 Choose a/an item/word from COLUMN B that matches a description in COLUMN A. Write only the letter (A–L) next to the question number (1.1.1–1.1.10) in the ANSWER BOOK.

COLUMN A		COLUMN B
1.1.1	Control the input and output devices	A hard disk
1.1.2	Store data that entered via the keyboard	B unicode
1.1.3	A magnetic device that is used as internal memory	C control unit
1.1.4	An international standard of which the goal is extend the ASCII to a 16-bit code	D ink-jet printer
1.1.5	A peripheral with a lever, which can move in different directions.	E WLAN
1.1.6	It changes the digital data from the computer into analogue data that can be transferred by telephone line	F speaker
1.1.7	Use a spray head that squirts drops of ink onto the paper to form characteristic	G joystick
1.1.8	Network that directly connects computers separated by long distance	H microphone
1.1.9	A program which can delete files containing valuable data	I virus
1.1.10	An audio input device that records music and voice input into the computers users	J WAN
		K modem
		L RAM

(10 × 2)

(20)

1.2 Indicate whether the following statements are TRUE or FALSE. Choose the answer and write only 'True' or 'False' next to the question number (1.2.1–1.2.10) in the ANSWER BOOK.

- 1.2.1 A function of control unit is to control the flow of information between the main memory and the arithmetic logic unit.
- 1.2.2 Columns in excel program are marked vertically from 1 to 1,048,576.
- 1.2.3 List view, displays only the file names vertically.
- 1.2.4 AVG is an anti-virus program.
- 1.2.5 Hardware devices cannot be touched.
- 1.2.6 1 000 bytes is equal to one kilobyte.
- 1.2.7 The most sophisticated colour screen displays 256 or more colours.
- 1.2.8 CPU stands for Carpal Processing Unit.
- 1.2.9 Printing with non-impact printers, the paper can be sprayed with ink.
- 1.2.10 The backspace key deletes all characters before the cursor.

(10 × 1) (10)

1.3 Various options are given as possible answers to the following questions. Choose the answer and write only the letter (A–D) next to the question number (1.3.1–1.3.10) in the ANSWER BOOK.

- 1.3.1 When a printout of the work you have keyed in is made, it is called a ...
 - A soft copy.
 - B hard copy.
 - C saved copy.
 - D electronic copy.
- 1.3.2 If you have a paper jam, you should ...
 - A always tug the paper out of the printer.
 - B never fan the paper out.
 - C always leave the paper as it is.
 - D never switch the printer off.

- 1.3.3 The first step in changing the ruler setting from inches to centimetres is to click on ...
- A options.
 - B advanced.
 - C display.
 - D file.
- 1.3.4 A safety tip to prevent electrical disasters is to ...
- A leave cords dangling anywhere.
 - B keep unprotected cords in the path of foot traffic.
 - C keep all electrical items and extension cords in a good condition.
 - D place power cords and extensions under carpets.
- 1.3.5 Ergonomics is the study of workplace design and the effect it has on the ...
- A physical and psychological wellbeing of the employee.
 - B physical and mental wellbeing of the employee.
 - C wellness of the employer.
 - D None of the above
- 1.3.6 The conversion of data send over telecommunication lines into a form that cannot be easily understood by unauthorised people:
- A Decryption
 - B Encryption
 - C Organisation
 - D Readable
- 1.3.7 www.college.co.za is a website. What does 'za' stands for:
- A Zambia
 - B South Africa
 - C Swaziland
 - D Zambezi
- 1.3.8 Marketing or advertising material sent by email without the recipient's permission.
- A Spam
 - B Malware
 - C Encryption
 - D Firewall

1.3.9 Illegally copying copyrighted software:

- A Piracy
- B Copyright
- C License
- D Freeware

1.3.10 An example of an output device is a ...

- A webcam.
- B joystick.
- C mouse.
- D monitor.

(10 × 2) (20)
[50]

QUESTION 2

2.1 Name the sections in which a keyboard is divided. (5)

2.2 Why has instant messaging (IM) become a very popular means of conversation? (10)

2.3 What is a PDF file? Why would you convert a document into PDF format? (5)
[20]

QUESTION 3

3.1 What the following stand for:

3.1.1 CPU

3.1.2 CTS

3.1.3 RSI

3.1.4 ICT

3.1.5 GUI

3.1.6 IP

3.1.7 LAN

3.1.8 CVS

3.1.9 www

3.1.10 RAM

(10 × 2) (20)

- 3.2 Define the terms *copyright* and *plagiarism*. (4)
- 3.3 Name SIX different options for connecting to the internet. (6 × 1) (6)
- [30]**

QUESTION 4

- 4.1 Explain briefly the differences between *Operating Systems* and *Application Software* and give TWO examples of each. (8)
- 4.2 What are the characteristics of a good user name? (5)
- 4.3 Name FIVE functions of a mouse. (5)
- 4.4 What is a *path*? (2)
- [20]**

TOTAL SECTION A: 120

SECTION B (PRACTICAL)**WORD PROCESSING**

THIS SECTION IS DONE ON THE COMPUTER IN THE COMPUTER ROOM USE THE FONT TYPE ARIAL 12PT.

Your EXAMINATION NUMBER as well as the QUESTION NUMBER must appear as a HEADER on each PRINTOUT.

HANDWRITTEN EXAMINATION NUMBERS AS WELL AS WELL AS QUESTION NUMBERS ARE NOT ACCEPTABLE.

The PRINTOUTS to be marked must be placed in the cover/folder in the CORRECT SEQUENCE.

QUESTION 5

This document has already been keyed in by the computer lecturer on the data diskette. The name of the document is QUESTION 5. The following is a copy of the document saved as QUESTION 5.

Terra Optima the apple grower

Terra Optima is a professional apple growing company that cultivates several varieties of apples on 24 hectares of land. The farm has its own irrigation system and the entire surface is covered with nets, protecting the apples from hail storms. The highest percentage of the surface is covered with Golden Delicious, Fuji, Superchief and Granny Smith apples.

Terra Optima invests a lot of effort in tracking everything from pruning, irrigation, fertilisation, spraying, and other activities during the entire growing season. This stresses the importance of data import simplicity and easier data analysis. Terra Optima has previously relied on solutions not so greatly tailored towards agriculture, wasting a lot of time structuring data in spreadsheets and creating customised analytics and charts which are difficult to understand and to share.

'In the beginning we used a classic Microsoft Office data management approach, until we found out about Agrivi and quickly transferred to your Farm Management System. Agrivi offers a very simple and easy way of tracking work, finances, workforce and weather alarms connected to pest and disease occurrence.' ~ TerraOptima

Terra Optima needed a solution which can be used not only to record and store data, but also to make analysing that data quicker and easier. What good are all the spreadsheets and notes when at the end of the day you still have to mine through them to make any sense of them, let alone create reports that make sense to your supervisors? Agrivi helped Terra Optima record relevant operations in seamless fashion, while greatly reducing the need of sitting in front of the computer and wasting time analysing data while there's work to be done on the farm.

'Agrivi gives us the ability of quickly and easily creating a weekly, monthly or yearly report about work on our plantation, finances, income projections, as well as the ability to quickly exchange production reports with our company's managing directors...' ~ TerraOptima

Terra Optima is currently working on expanding their farm with additional 10 hectares of land. Using Agrivi has helped streamline their operations and gave structure to their business from the management standpoint. A company that is growing rapidly needs partners who can provide cost effective, value adding solutions that will help them overcome business challenges and support their growth.

'All in all, Agrivi saves time and it's very easy to use in modern apple production such as ours.' ~ TerraOptima

- 5.1 Open the document saved as QUESTION 5 and insert your EXAMINATION NUMBER left and QUESTION NUMBER right as header. (2)
- 5.2 Change the main heading to uppercase, centre, font Algerian 16pt. (4)
- 5.3 Insert drop cap of the first letter of the first paragraph. (2)
- 5.4 After paragraph four, insert double wave shape from stars and banners. (2)
- 5.5 Insert the following information in the shape.
'Agrivi saves time' (4)
- 5.6 Indent paragraph five 3 cm both left and right. (4)
- 5.7 Go to footer and insert the following information in Jokerman 10pt, centre and italics.
'Modern apple production' (5)
- 5.8 Insert page boarder of your choice. (2)
- 5.9 Copy the last paragraph and place it after paragraph one. (3)
- 5.10 Save and print the document and put it in your answer sheet. (2)

[30]

SPREADSHEET

QUESTION 6

- 6.1 Create the following document in the Excel program. **USE THE EXACT CELL REFERENCES AS INDICATED.**

	A	B	C	D	E	F	G
1	TERRA OPTIMA APPLE FARMER GROWER						
2							
3	DEBTORS: BALANCE SHEET						
4							
5	DEBTOR	TOTAL	0-30 DAYS	31-60 DAYS	61-90 DAYS	91-120 DAYS	120+ DAYS
6	Beachcomber Farm		567	343	101		100
7	Joel Rash Farm		456	232	202	100	
8	Fruit and Vege Market		345	121	303	80	50
9	Boxer Supermarket		234	200	404	60	100
10	Spar Hypermarket		124	300	505	40	150
11	Rowel Dolly Farm		678		606	20	200
12	Limpopo Dairy		789	345			250
13							
14	GROSS TOTAL						
15	% OF TOTAL						
16							
17	AVERAGE						
18	HIGHEST						
19	LOWEST						
20	NUMBER						

(5)

- 6.2 Insert your EXAMINATION NUMBER and QUESTION 6 on the right-hand side as a header.

(2)

- 6.3 Adjust the column to fit all the data as indicated.

(1)

- 6.4 Save the document as QUESTION 6.

- 6.5 Print the document on A4 portrait with row and column headings or the gridlines.

(2)
[10]

QUESTION 7

- 7.1 Retrieve the document QUEST 6 and save immediately as QUESTION 7. Also change QUESTION 6 to QUESTION 7 on the HEADER.

	A	B	C	D	E	F	G
1	TERRA OPTIMA APPLE FARMER GROWER						
2							
3	DEBTORS: BALANCE SHEET						
4							
5	DEBTOR	TOTAL	0-30 DAYS	31-60 DAYS	61-90 DAYS	91-120 DAYS	120+ DAYS
6	Beachcomber Farm	A	567	343	101		100
7	Joel Rash Farm		456	232	202	100	
8	Fruit and Vege Market		345	121	303	80	50
9	Boxer Supermarket		234	200	404	60	100
10	Spar Hypermarket		124	300	505	40	150
11	Rowel Dolly Farm		678		606	20	200
12	Limpopo Dairy		789	345			250
13							
14	GROSS TOTAL	B					
15	% OF TOTAL		G				
16							
17	AVERAGE		C				
18	HIGHEST		D				
19	LOWEST		E				
20	NUMBER		F				

(1)

- 7.2 Merge and centre cell range A1–E1 and change the font to Tahoma, 20pt. (3)

- 7.3 Change the column headings in row 3 to bold and apply 5% gray shading. (3)

- 7.4 Provide the formulae and/or function for cells marked with a letter of the alphabet. Use cell references and absolute addresses where applicable. Copy the formulae as indicated to complete the spread sheet.

- A TOTAL of each debtor (sum of all terms). (2)
- B GROSS TOTAL = the sum of each term. (2)
- C–F Use the appropriate functions to calculate the AVERAGE, HIGHEST, LOWEST and NUMBER of debtors. (12)
- G Calculate the TOTAL of each period as a percentage of the GROSS TOTAL. (2)

- 7.5 Display all amount as currency with two decimals. (2)
- 7.6 Insert horizontal and vertical lines with the method you are familiar with. (2)
- 7.7 Print the document on A4 landscape without row and column headings or the gridlines. (1)
- [30]**

QUESTION 8

- 8.1 Retrieve the document QUESTION 7. Create a separate chart sheet with a simple column chart showing the TOTAL of each debtor. (2)
- 8.2 The following must appear on the chart:
- TITLE: TOTAL
EXAMINATION NUMBER (3)
- 8.3 Format the Primary Major horizontal lines to 3pt. (3)
- 8.4 Print the document in landscape without the row and column headings. The document should fit onto one A4 landscape page. (2)
- [10]**

TOTAL SECTION B: 80
GRAND TOTAL: 200