



higher education & training

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

NATIONAL CERTIFICATE

DATA MANAGEMENT: FARMING N5

(4090465)

**8 October 2020 (X-paper)
09:00–12:00**

This question paper consists of 16 pages.

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DEPARTMENT OF HIGHER EDUCATION AND TRAINING
REPUBLIC OF SOUTH AFRICA
NATIONAL CERTIFICATE
DATA MANAGEMENT: FARMING N5
TIME: 3 HOURS
MARKS: 200

INSTRUCTIONS AND INFORMATION

**TURN THE PAGE FOR THE INSTRUCTIONS.
YOU GET 25 MINUTES TO READ THE
INSTRUCTIONS.**

INSTRUCTIONS TO INVIGILATORS AND CANDIDATES

Read the following instructions carefully before attempting to answer the question paper. Invigilators will explain anything that is unclear if necessary.

1. The question paper consists of TWO sections:

SECTION A	: Theory	100 marks
SECTION B	: Word processing/text manipulation and spreadsheet and database	100 marks

SECTION A must be answered in the ANSWER BOOK. The ANSWER BOOK must be placed on top of all the printouts in the yellow folder.

SECTION B will be done on the computer using word processing, spreadsheets and a database program. Each printout must have both the EXAMINATION NUMBER and the QUESTION NUMBER inserted as either a header or a footer (as per instruction). Hand-written examination numbers and question numbers are NOT acceptable.

The printouts must be placed in the folder in the correct sequence. Candidates making use of continuous paper must tear the pages apart before handing them in.

2. The time allocated for the question paper is THREE hours.
3. No additional printing time is allowed.
4. In the event of a power failure or a computer or printer breakdown, the invigilator will make the necessary arrangements for the candidates to continue, and the actual time lost must be added.
5. If there is a problem with certain printers, for example, they cannot print 'ë', the invigilator will include a report thereon with the answer sheets of your centre.
6. A candidate may have in his/her possession a typing ruler, a dictionary and a list of ASCII codes. Spellcheck may be used.
7. Each answer must be printed on a separate sheet of paper and on one side of the paper only. Printouts must be placed in the examination folders immediately.
8. Answer sheets may not be stapled together. Marks will be subtracted for printing on both sides of the paper as well as stapling of ANSWER SHEETS.

9. At the conclusion of the examination session, all printouts which a candidate wishes to be marked, must be placed in the examination folder, and all other printouts, together with the examination folder, must be handed to the invigilator. No printouts whatsoever may be removed from the examination room or discarded into wastepaper bins. Printouts not submitted for marking must be collected by the invigilator at the end of each session and must be destroyed at the end of the day. Only ONE printout per question or subsection of a question may be handed in.
10. Printouts to be marked must be arranged in the same order as that of the questions in the question paper. Marks will be subtracted for answer sheets not arranged into number order.
11. Printouts may be done on A4 sheets of paper or on continuous computer paper, unless a specified size of paper is required in a question or a letterhead is supplied.
12. All work on the computer should be saved at regular intervals to prevent loss of work in the event of a power failure. NO additional time MAY be allowed for such lost work. It is the candidates' responsibility to protect their answers from obliteration.
13. In order to print the original as well as the edited attempts of the answers, candidates are reminded to save the work after each separate section before it is printed.
14. At the end of the examination session, each candidate must hand in the printouts of the answers as well as a diskette with the saved answers (properly marked with the candidate's examination number on the cover). These diskettes must be handed to the examination section by the invigilator for safekeeping for one year in case enquiries should be made by the examiner/moderator and superintendents of examination. If there are no diskettes to save the answers, candidates must create folders on the computer on which they are working and save all their work in that folder which is named using their examination number. The invigilator will then save the folders on a USB and submit the USB to the examination office for safe keeping (for one year).
15. Take note that no paper may be taken out of the examination room, including question papers. All papers must be handed in. Question papers may be given to candidate at the end of the last session.
16. In the event of an examination paper being examined in more than one session, invigilators must ensure that all answers of candidates are removed from the hard disks or the network before candidates for the next session are allowed into the room.
17. No candidate may print his/her work for another candidate, make his/her flash disk/storage device available to another candidate or access other candidates' work on the network. Any attempt to access information from or transfer information to another candidate in whatever manner is a contravention of the examination rules and regulations, and it will be treated as an irregular act.

SECTION A (THEORY)**QUESTION 1**

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 (1.1–1.10) in the ANSWER BOOK.

- 1.1 An intranet is a ...
- A network system.
 - B private company network. 
 - C filing system.
 - D private company network, including external users.
- 1.2 Which statement is correct about ROM?
- A It is called the main memory.
 - B It is a volatile memory.
 - C It contains data that cannot be changed.
 - D It is the home of the silicon chip.
- 1.3 The speed of the central processing unit is measured in ...
- A gigabytes.
 - B bytes.
 - C kilobytes. 
 - D megahertz.
- 1.4 The right-hand mouse button is used to ...
- A display a shortcut menu.
 - B select an option.
 - C select bold.
 - D insert a toolbar.
- 1.5 The following peripheral can be classified as both an input and an output device:
- A Speaker 
 - B Laser printer
 - C Visual display unit
 - D Plotter
- 1.6 Which ONE of the following is a valid and more precise statement?
- A 1 KB = 1 024 bytes
 - B 1 MB = 1 024 kilobytes
 - C 1 KB = 1 000 kilobytes
 - D 1 MB = 1 000 kilobytes

1.7 ... is an organised collection of related information or data.

- A A spreadsheet
- B A database
- C Rows
- D An e-mail



1.8 Which of the following is NOT a mobile application?

- A iBook
- B WhatsApp
- C Maps
- D YouTube

1.9 A hardware station frame and set of electrical connection interfaces that enable a laptop computer to effectively serve as a desktop computer:

- A Docking station
- B UPS
- C FireWire connection
- D Ethernet connection

1.10 Which of the following storage devices can store a maximum amount of data?

- A Hard disk
- B Floppy disk
- C Compact disk
- D Magneto-optic disk



(10 × 1) [10]

QUESTION 2

Indicate whether the following statements are TRUE or FALSE by writing only 'True' or 'False' next to the question number (2.1–2.5) in the ANSWER BOOK.

2.1 An end-user licence agreement is a legal contract between a vendor and the wholesaler of the software.

2.2 Double-clicking a desktop icon starts or opens the item it represents.

2.3 Larger commercial computers are called notebook computers.



2.4 A trial version is a program that has been copyrighted, but the creator offers it to anyone to copy and try out.

2.5 One example of modifier keys is Alt.

(5 × 2) [10]

QUESTION 3

Choose a/an word/item from COLUMN B that matches a description in COLUMN A. Write only the letter (A–M) next to the question number (3.1–3.10) in the ANSWER BOOK.

COLUMN A		COLUMN B	
3.1	A pointing device that can be used instead of the keyboard to move the cursor	A	defragmentation
3.2	Preparation of a hard disk in a format that enables Windows to write data to and retrieve data from it	B	WAN
3.3	An audio input device that records music and voice input into a computer	C	mouse
3.4	Protects the user against an unexpected power failure	D	Trojan horse
3.5	The process of rewriting parts of a file to contiguous sectors on a hard disk to increase the speed of access and retrieval	E	modem
3.6	A computer network that directly connects computers over a wide geographical area	F	mobile application
3.7	Software application designed to run on smartphones	G	relative formatting
3.8	A device that is linked to a computer and a telephone line	H	plagiarism
3.9	Disguised in computer programs that seem legitimate, for example, computer games and utility programs	I	uninterrupted power supply
3.10	Taking someone else's ideas or information and presenting it as your own	J	partitioning
		K	microphone
		L	file allocation table
		M	physical formatting

(10 × 1)

[10]

QUESTION 4

Complete the following sentences by filling in the missing word(s). Write only the word(s) next to the question number (4.1–4.10) in the ANSWER BOOK.

- 4.1 A ... is the permanent storage of a computer.
- 4.2 A dot matrix printer is an example of an ... printer. 
- 4.3 A small, removable storage medium used with digital cameras, which can be handheld and a mobile computer to store text, picture, audio and video, is called a
- 4.4 A ... program is used to type letters.
- 4.5 ... refers to the maximum width of paper that can be used.
- 4.6 A ... is used to connect the computer to a telephone line to obtain internet access.
- 4.7 ... is a phenomenon where parts of a file are scattered all over the disk.
- 4.8 In computer terms, a milliard byte is referred to as a
- 4.9 ... technology converts the telephone line, just before it enters your home, into access paths for multimedia and high-speed communication.
- 4.10 The ... is a subset of the internet. 

(10 × 1) **[10]**

QUESTION 5

- 5.1 Many computer users are storing their data online.
State FOUR benefits of online file storage. (4 × 2) (8)
- 5.2 The compact disc and the digital versatile disc are optical discs which use laser technology. 
Describe FIVE ways in which you can handle and care for optical discs. (5 × 2) (10)
- 5.3 Give FOUR characteristics of non-impact printers. (4 × 2) (8)
- 5.4 Name any FOUR types of online software. (4) **[30]**

QUESTION 6

6.1 Use the figure below to answer QUESTIONS 6.1.1 to 6.1.4 in the ANSWER BOOK.



Name	Date modified	Type	Size
2018 APPLICATION HARD COPY	2018/04/10 08:09	Adobe Acrobat D...	31 KB
APPLICATION 2017	2017/07/26 12:34	Adobe Acrobat D...	4 825 KB
-Bank Account confirmation letter-62051...	2018/04/10 07:57	Adobe Acrobat D...	154 KB
CHEMICAL BUSARY 2018	2018/06/04 09:17	Adobe Acrobat D...	1 541 KB
COMMITMENT LETTER CHIETA HOST U	2018/04/09 16:08	Adobe Acrobat D...	741 KB
COMMITMENT LETTER CHIETA UN	2018/04/10 08:07	Adobe Acrobat D...	741 KB
COMMITMENT LETTER MADZELECTRICAL	2018/04/10 09:54	Adobe Acrobat D...	296 KB
final document	2018/04/10 14:55	Adobe Acrobat D...	34 KB
Funding Model 2018 APPLICATION word	2018/04/09 10:53	Microsoft Word D...	18 KB
Funding Model 2018 APPLICATION	2018/04/09 10:30	Adobe Acrobat D...	100 KB
LEARNER INFORMATION 2018	2018/03/08 15:59	Microsoft Excel W...	12 KB
Learner_template 2018 APPLCIATION	2018/04/09 10:26	Microsoft Excel M...	2 078 KB
Letter of Commitment 2018 word	2018/04/09 12:48	Microsoft Word D...	13 KB
Letter of Commitment 2018	2018/04/09 10:25	Adobe Acrobat D...	16 KB
Letter to Cheita MD Confirmation UNARL...	2018/04/09 15:37	Adobe Acrobat D...	218 KB
Letter to Cheita MD Confirmation Rev 0	2018/04/10 08:05	Adobe Acrobat D...	218 KB
MOU CHEMICAL LECTURER DEVE 2018	2018/06/04 08:21	Adobe Acrobat D...	1 541 KB
MOU LECTURER DEV 2	2018/06/04 08:22	Adobe Acrobat D...	1 541 KB
MoU Lecturer Dev 3	2018/06/04 08:29	Adobe Acrobat D...	1 541 KB
MoU Lecturer Dev 4	2018/06/04 08:30	Adobe Acrobat D...	1 541 KB

6.1.1 What is the folder name of this view? (1 × 2) (2)

6.1.2 How many files were created in April 2018? (1 × 2) (2)

6.1.3 Indicate the biggest file in this view and when it was modified. (2 × 2) (4)

6.1.4 Write down the file extensions of the following files:

A Learner Information 2018

B MoU Lecturer Dev.

C Letter of commitment word

(3 × 2) (6)

6.2 Explain the term *software piracy*.



(2)
[16]

QUESTION 7

- 7.1 Describe TWO properties of a universal serial bus.  (2)
- 7.2 Give FOUR situations in which you might encounter computer-based systems in your everyday life. (4 × 1) (4)
- 7.3 State what embedded computers are and give examples of these computers.  (2 × 2) (4)
- 7.4 What is the difference between an *internet* and an *intranet*? (2 × 2) (4)
- [14]**

TOTAL SECTION A: 100

SECTION B: PRACTICAL

QUESTION 8

Farmstalls on the Frontier

Road trippers travelling through the dry spaces of South Africa's heartland need to know where the next oasis lies. Meet the classic Karoo farmstall. 

The Karoo is a semi-desert region of South Africa, covering 40% of the land mass in the country and encompassing about 100 towns and villages. It is home to fewer than a million people. There are long tracts of road between settlements. At times, a traveller is so delightfully alone and isolated in the midst of the vast landscape with its open skies and wide-angled horizons, that it may feel as if he/she is the last survivor in a dry, post-apocalyptic world.

But if you're hungry, thirsty or in need of a toilet break, this is a less than romantic proposition.

The solution comes in the form of dozens of colourful little farmstalls ('padstalle') which are scattered between towns, usually on a patch of roadside farmland, throughout the Eastern and Northern Cape.

Any farmstall worthy of the name has its own specialty food item created from a secret recipe. This could be biltong, a delicious pie, nougat or a bottle of something with a catchy name to remind you of the little spot you bought it from once you're back home.

When you walk into a Karoo farmstall, you're treated to a slice of local life. On offer is a variety of preserves, dried meats, sit-down meals and takeaway specials – mostly prepared by farmers' wives. 

The shelves are also usually lined with regional products, crafts and books, all ideal gifts and mementos of your journey through the world's friendliest desert.

Here are 10 Karoo farmstalls worth stopping for:

Milk and Honey farmstall
Daggaboer farmstall
Karoo Roos farmstall
Jagpoort farmstall
Oppi-Vlak farmstall
Thamela farmstall
Ark in the Karoo farmstall
Oma Miemie's farmstall
Die Pienk farmstall
Tankwa farmstall

8.1 Open the document and save it as 'QUEST 8'. Insert your EXAMINATION NUMBER on the left and QUESTION 8 on the right as header and save it as 'QUEST 8A'. 

(2)

8.2 Change the appearance of the main heading to uppercase and apply/insert your own word art.

(3)

- 8.3 Drop-cap the first letter in paragraph two.  (3)
- 8.4 Change paragraphs 4, 5 and 6 to THREE columns with a line in between. (5)
- 8.5 Change paragraph 7 to bold, italics and underline and apply centre alignment. (4)
- 8.6 Insert numbers next to the list of farmstalls. (2)
- 8.7 Save the document and make a printout. (1)
- [20]**

QUESTION 9

SPREADSHEET

- 9.1 Create the following document in the spreadsheet program. Use the exact cell references as indicated. (5)

	A	B	C
1	EXTREME MAIZE DISTRIBUTORS		
2			
3	INCOME:	2018/08/01	
4			
5	PRODUCTS	PACKAGE UNIT (KG)	COST PRICE PER KG
6			
7	ACE	10	15,50
8	BLUE BIRD	12,5	4,00
9	BOKOMO	12,5	4,50
10	GOLDEN CLOUD	50	6,50
11	IMPALA	10	13,00
12	IWISA	80	5,00
13	SASKO	80	1,50
14	SNOWFLAKE	80	1,20
15	TOTAL		

- 9.2 Insert your examination number and 'Question 9A' on the right-hand side as a header. (1)
- 9.3 Adjust the column to fit all the data as indicated. (2)
- 9.4 Save the document as 'QUEST 9A'.  (1)
- 9.5 Print the document in A4 portrait format, with row and column headings but without gridlines. (2)
- [10]**

QUESTION 9B

- 9.6 Retrieve the document called 'QUEST 9A' and immediately save it as 'QUEST 9B'. Also change 'Question 9A' to 'Question 9B'.



	A	B	C	D	E	F	G	H	I
1	EXTREME MAIZE DISTRIBUTORS								
2									
3	INCOME		2018/08/01						
4									
5	PRODUCTS	PACKAGE UNIT (KG)	COST PRICE PER KG	COST PRICE PER UNIT	SELLING PRICE	OPENING STOCK	STOCK ON HAND	INCOME	% OF INCOME
6	ACE	10	15,50	A	B	37	17	C	E
7	BLUE BIRD	12,5	4,00	↓	↓	39	19	↓	↓
8	BOKOMO	12,5	4,50	↓	↓	30	10	↓	↓
9	GOLDEN CL	50	6,50	↓	↓	35	15	↓	↓
10	IMPALA	10	13,00	↓	↓	36	16	↓	↓
11	IWISA	80	5,00	↓	↓	33	13	↓	↓
12	SASKO	80	1,50	↓	↓	42	20	↓	↓
13	SNOWFLAK	80	1,20	↓	↓	40	10	↓	↓
14	TOTAL							D	



(1)

- 9.7 Insert the column headings as they appear in the diagram and all numbers appearing in the 'Opening Stock' and 'Stock on Hand' columns. (4)
- 9.8 In A1, format the heading to Bernard MT Condensed 20 pt and then merge and centre cell A1 to I1. (4)
- 9.9 Change the appearance of the column headings to bold and apply a light shading of your choice. (4)
- 9.10 Provide the formulas and/or function for cells marked with a letter of the alphabet. Use cell references and absolute addresses where applicable.
- A COST PER UNIT = Package unit multiplied by cost price per kg (2)
- B SELLING PRICE = 10% of cost price per kg (2)
- C INCOME = Opening stock minus stock on hand multiplied by selling price (2)
- D TOTAL = Total sum of the INCOME (2)
- D % of INCOME = Calculate the percentage of the income. (3)
- 9.11 Display all figures that represent money with R sign and two (2) decimal places. (2)
- 9.12 Insert horizontal and vertical lines using a method with which you are familiar. (2)
- 9.13 Print the document in A4 landscape, without row and column headings and gridlines. (2)
- [30]**

QUESTION 9C

- 9.14 Retrieve the document named 'QUEST 9B' and immediately save it as 'QUEST 9C'.
- 9.15 Insert a 2-D pie chart with package units and products. (2)
- 9.16 The legend must be displayed at the right-hand side. Insert the data label callout. (3)
- 9.17 In the chart title the following must be displayed:
 PACKAGE UNIT
 Your EXAMINATION NUMBER
 QUESTION 9C (3)
- 9.18 Make a printout of the graph on a separate page. (2)
- [10]**

QUESTION 10**DATABASE**

10.1 Open the database programme, create a database called 'DISTRIBUTION' and insert your EXAMINATION NUMBER. 

10.2 Create the following fields:

FIELD	INFORMATION
PRODUCTS	30 characters
SELLING PRICE	Currency (no more than R12 599.99)
INCOME	Currency (no more than R12 599.99)
DATE SOLD	In the format DD/MM/YYYY
NUMBER SOLD	Long integer
EXAM NO.	13 characters
QUESTION 10	10 characters

10.3 Key in the following records and save the table as 'Production'.
Make a printout of the table in A4 landscape. 

[10]

PRODUCTS	SELLING PRICE	INCOME	DATE SOLD	NUMBER SOLD	EXAMINATION NUMBER	QUESTION 10
ACE	R170.50	R3 410.00	2018/05/02	37	YOUR EXAM NO.	QUESTION 10
BLUE BIRD	R55.00	R1 100.00	2018/08/09	39	YOUR EXAM NO.	QUESTION 10
BOKOMO	R61.50	R1 237.50	2018/07/29	30	YOUR EXAM NO.	QUESTION 10
GOLDEN CLOUD	R357.50	R7 150.00	2018/08/24	35	YOUR EXAM NO.	QUESTION 10
IMPALA	R143.00	R2 860.00	2018/08/14	36	YOUR EXAM NO.	QUESTION 10
IWISA	R440.00	R8 800.00	2018/06/06	33	YOUR EXAM NO.	QUESTION 10
SASKO	R132.00	R2 904.00	2018/08/31	42	YOUR EXAM NO.	QUESTION 10
SNOWFLAKE	R105.60	R3 168.00	2018/07/30	40	YOUR EXAM NO.	QUESTION 10

- 10.4 Make a printout of a structure of the table above. The printout must be in portrait.

[10]

- 10.5 Create a report using the following headings:



PRODUCTS	INCOME	DATE SOLD
----------	--------	-----------

(3)

- 10.6 Sort the data in ascending order according to the income.

(2)

- 10.7 The title of the report must be your 'EXAMINATION NO. QUEST 10 REPORT'.

(3)

- 10.8 Make a printout of the report on an A4 page in portrait.

(2)
[10]

TOTAL SECTION B: 100
GRAND TOTAL: 200