higher education & training

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

NATIONAL CERTIFICATE

DATA MANAGEMENT: FARMING N4

(4090454)

8 November 2022 (X-paper)
09:00–12:00

A typing ruler, dictionary and list of ASCII codes may be used.

STUDENTS ARE ALLOWED 25 MINUTES TO READ THE INSTRUCTIONS.

This question paper consists of 12 pages.

016Q1B2208

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DEPARTMENT OF HIGHER EDUCATION AND TRAINING
REPUBLIC OF SOUTH AFRICA

NATIONAL CERTIFICATE
DATA MANAGEMENT: FARMING N4
TIME: 3 HOURS
MARKS: 200

INSTRUCTIONS TO INVIGILATORS AND CANDIDATES

Read the following instructions carefully before attempting to answer the questions – invigilators will explain, if necessary.

INSTRUCTIONS AND INFORMATION

1. The question paper comprises two sections, namely:

   SECTION A: Theory (120 marks)
   SECTION B: Word processing/text manipulation and spreadsheet (80 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 EXAMINATION FOLDER.

   SECTION B is done on computer with the aid of a word processing and spreadsheet program. Each PRINTOUT must contain both the printed EXAMINATION NUMBER and the QUESTION NUMBER either as header or footer (as per instruction). Handwritten EXAMINATION NUMBERS and QUESTION NUMBERS are not acceptable.

   The PRINTOUTS must be placed in the EXAMINATION FOLDER in the correct sequence. Candidates who use continuous paper must tear the pages apart before handing in.

2. The time allocated for the question paper is THREE hours.

3. No additional printing time will be allowed.

4. In the event of a power failure or a computer or printer breakdown, the invigilator must 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, e.g. does not print ë, a report must be sent with your centres' PRINTOUTS.

6. Candidates may have a typing ruler, a dictionary and a list of ASCII codes in their possession. The spell checker may be used.

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7. Each answer must be printed on ONE side of a SEPARATE sheet of paper only. PRINTOUTS must be placed in the EXAMINATION FOLDERS immediately.

8. Do not staple PRINTOUTS. Marks will be subtracted for printing on both sides of the paper and/or for stapling PRINTOUTS.

9. At the end of the examination session all PRINTOUTS to be marked, must be placed in the EXAMINATION FOLDER and all other PRINTOUTS, together with the EXAMINATION FOLDER, must be handed to invigilator. No PRINTOUTS whatsoever may be removed from the examination room or placed in the waste-paper bins. PRINTOUTS not submitted for marking must be collected 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 EXAMINATION PAPER. Marks will be subtracted if PRINTOUTS are not arranged in numerical order.

11. PRINTOUTS may be on A4 sheets of paper or on continuous computer paper; unless a specified size of paper is required in a question or if 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 will be allowed to redo 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. Please 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 returned to candidates at the end of the last session.

15. In the event of a QUESTION 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 examination room.

No candidate may print his/her work for another candidate, make his/her floppy 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 will be treated as an irregular act.

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SECTION A

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 This virus is hidden in valid programmes with the main purpose to identify and limit illegal copying of programmes.

A Worm
B Trojan Horse
C Logical bomb
D Michelangelo

1.2 In the event of a paper jam …

A always pull the paper out of the printer.
B never fan the paper out.
C always leave the paper as it is.
D never switch off the printer.

1.3 Which of the following extensions indicate word processing documents?

A .xxls
B .pdf
C .docx
D .wpd

1.4 Which of the following opens the backstage and menu with file-related commands?

A Ribbon
B To-do bar
C File instant
D File tab

1.5 The first step in changing the ruler setting from inches to centimetres is to click on …

A options.
B advanced.
C display.
D file.

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1.6 When making a PRINTOUT of the work keyed in, it is called a …

A soft copy.
B hard copy.
C saved copy.
D electronic copy.

1.7 The tab stop …

A aligns text around the decimal point.
B centres text at the tab as you enter text.
C inserts a vertical line at the tab stop location.
D sets a first line paragraph indent.

1.8 A safety tip to prevent electrical disasters is …

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.

1.9 Which ONE of the following is not an image file?

A .bmp
B .png
C .wmv
D .jpg

1.10 How can one move the 'My computer' to the desktop if it is not there?

A From wallpaper
B From Settings
C From Display Properties
D From Explorer

(10 × 2) **[20]**

QUESTION 2

Indicate whether the following statements are TRUE or FALSE by writing only 'True' or 'False' next to the question number (2.1–2.10) in the ANSWER BOOK.

2.1 A USB is a printing device.

2.2 The CPU is composed of the LAN and the arithmetic logic unit.

2.3 A laser printer operates on the same principle as a photocopier.

2.4 Columns in MS Excel are marked vertically from 1 to 1,048,576.

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2.5 A graphic user interface is not an additional part of the operating system.

2.6 Text or graphics entered in a footer appears automatically at the top of every page.

2.7 In the control panel window one can change the hardware and software settings of a computer.

2.8 Lighting is a health factor in computer use.

2.9 PDAs stand for Public Digital Assistants.

2.10 A hard disk is a magnetic device that is used as external memory for magnetic storage of data.

(10 × 2) **[20]**

QUESTION 3

Choose a term from COLUMN B that matches a description in COLUMN A. Write only the letter (A–L) next to the question number (3.1–3.10) in the ANSWER BOOK.

COLUMN A		COLUMN B	
3.1	Controls input and output devices	A	hard disk
3.2	Stores data that entered via the keyboard	B	unicode
3.3	A magnetic device that is used as internal memory	C	control unit
		D	ink-jet printer
3.4	A peripheral with a lever that can move in different directions	E	WLAN
3.5	It changes the digital data from the computer into analogue data that can be transferred by telephone lines	F	speaker
		G	joystick
3.6	Uses a spray head to squirt drops of ink onto the paper to form of characters	H	microphone
		I	virus
3.7	Network that directly connects computers separated by long distance	J	WAN
3.8	A program that can delete files containing valuable data	K	modem
		L	RAM
3.9	An audio input device that records music and voice input by computer users		
3.10	A set of instructions that infects software and is introduced into executable programs		

(10 × 2) **[20]**

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QUESTION 4

4.1 Computers use systems.

What is the difference between *system software* and an *operating system*?
(2 × 2) (4)

4.2 A mainframe computer is one type of computer.

Briefly describe the characteristics of mainframe computers. (5 × 2) (10)

4.3 In FIVE points, explain how to copy one file from a flash drive to the hard disk.
(5 × 2) (10)

4.4 A CPU has two main memories, namely ROM and RAM. In table format, distinguish between *RAM* and *ROM*. (6)
[30]

QUESTION 5

Complete the following sentences by writing only the missing word or words next to the question number (5.1–5.10) in the ANSWER BOOK.

5.1 A … is the permanent storage of a computer.

5.2 A dot matrix printer is an example of a … printer.

5.3 A small, removable storage medium used with digital cameras, handheld and mobile computers to store text, picture, audio and video is called a …

5.4 A … program is used to type letters.

5.5 … refers to the maximum width of paper that can be used.

5.6 A … is used to connect a computer to a telephone line to obtain internet access.

5.7 … is the process of rewriting parts of a file to contiguous sectors on a hard disk to increase the speed of access and retrieval.

5.8 A billion bytes in computer terms is equivalent to … bytes.

5.9 A … is an audio input device that records (captures) music and voice input into the computer.

5.10 A small digital camera that can be used to send live videos over the internet or other networks.

(10 × 1) **[10]**

QUESTION 6

6.1 What can one do to protect your computer against viruses? Mention FIVE points. (5 × 2) (10)

6.2 Name at least FIVE rules to remember when creating a file name. (5 × 2) (10)
[20]

TOTAL SECTION A: 120

SECTION B: (PRACTICAL)

WORD PROCESSING

This section is done on computer. Use the font type Arial 12 pt.

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

The PRINTOUTS to be marked must be placed in the EXAMINATION FOLDER in the same sequence as the questions in the QUESTION PAPER.

QUESTION 7

This document below, saved as QUEST 7, is a copy of the document already keyed in by the computer lecturer on the data diskette.

Philippolis has a rich history – not only as the oldest settlement in what is now the Free State, having been established as a station of the London Missionary Society (LMS) in 1822/1823, but also as a centre of the Griqua captaincies from the 1820s to the 1860s and, later, as a conflict zone in the Anglo-Boer war.

Close to the geographical centre of South Africa, Philippolis is well placed as an off-the-highway stop-over for tourists travelling between the Western, Southern and Eastern Cape in the south, and Botswana, Johannesburg-Pretoria in the north, and KwaZulu-Natal and Mpumalanga in the east. The deviation off the N1 highway on the R717 between Colesberg and Trompsburg is in fact shorter than the actual N1, making this not a detour at all.

Philippolis is a major centre for sheep-farming, horse-breeding, hunting and eco-tourism.

Serendipity is the natural ability to find interesting or valuable things which one is not looking for. Clay art therapy supports this ability in that it provides the artist with emotional release and healing. It helps people to face the obstacles they have within themselves, and when stripped of their defences, from that raw form, they begin to discover interesting and valuable things about themselves. Clay art therapy allows people to discover more fully who they are capable of being. This earthly, solid mass is explored by the senses; pushed, pulled, hollowed out, added to and moulded, emerging into a creation which is an expression of experience, inner being and hope. Lee Hutt, a psychotherapist once said about clay therapy, 'It's the same kind of feeling that you get when you fall in love.'

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Clay art therapy at Serendipity takes the form of small handmade artifacts, consisting of details which allow for the exploration of different techniques. These creations will be bisque fired and then taken home in their beautiful natural, yet detailed, form.

Come and play while you discover your potential and rejuvenate your mind, body and soul.

SOME BUILDINGS AND ARTIFACTS OF INTEREST TO TOURISTS

Adam Kok's House (1843), Cannons, Cemetery, Emily Hobhouse Memorial, Old Jail, Kruithuis (Powder House), Museum

OTHER TOWNS AND ATTRACTION AREAS

7.1 Open the document saved as QUEST 7 on the data diskette.

As a header, key in your EXAMINATION NUMBER (left-aligned) and QUESTION NUMBER (right-aligned). (2)

7.2 At the top centre of the document, insert the following heading in Tahoma 24 pt, bold and centred:

'FREE STATE' (4)

7.3 Change the left and right-hand margins to 3.8 cm/1.5 cm. (2)

7.4 Delete paragraphs 4 to 6. (3)

7.5 Change paragraph 3 to italics. (2)

7.6 Using the format, -1- , insert page numbers at the bottom right of the page. (3)

7.7 Insert and centre-align a star shape TWO line spaces below the last paragraph. (2)

7.8 Insert and fit the following text in bold and centred within the shape:

'COME AND ENJOY THE STAY!' (4)

7.9 Apply 3D style to the star shape. (4)

7.10 Centre-align the last paragraph. (2)

7.11 Save the document as QUEST 7, print, and place it in your EXAMINATION FOLDER. (2)

[30]

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SPREADSHEET

QUESTION 8

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

	A	B	C	D	E	F	G	H
1	FRAGRANCE							
2								
3	PRICE LIST: SEPTEMBER 2019							
4								
5	ITEM	QUANTITY	PRICE	TOTAL	DISCOUNT	TOTAL	VAT	INCOME
6			PER ITEM	PRICE	10%	REDUCED	14%	
7								
8	Aroma	48	149					
9	Baroque	50	149					
10	Rock Star	32	99					
11	Atomic	25	99					
12	Liquid Sky	60	199					
13	SJP Lovely	38	249					
14	PS London	28	199					
15	EA Red Door	18	349					
16	Shilpa 2	20	99					
17	RL Notorious	30	299					
18	TOTAL							
19	Highest Price							
20	Lowest price							

8.2 As a header, key in your EXAMINATION NUMBER and QUESTION 8 right-aligned. (2)

8.3 Adjust the column width to fit all the data as indicated. (1)

8.4 Save the document as QUEST 8

8.5 Print the document in A4 portrait orientation with row and column headings. (2)

[10]

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QUESTION 9

9.1 Retrieve the document saved as QUEST 8 and immediately rename it as QUEST 9. Also change QUESTION 8 to QUESTION 9 in the header. (2)

	A	B	C	D	E	F	G	H
1	FRAGRANCE							
2								
3	PRICE LIST: SEPTEMBER 2019							
4								
5	ITEM	QUANTITY	PRICE PER ITEM	TOTAL PRICE	DISCOUNT 10%	TOTAL REDUCED PRICE	VAT 14%	INCOME
6								
7								
8	Aroma	48	149	A	B	C	D	E
9	Baroque	50	149					
10	Rock Star	32	99					
11	Atomic	25	99					
12	Liquid Sky	60	199					
13	SJP Lovely	38	249					
14	PS London	28	199					
15	EA Red Door	18	349					
16	Shilpa 2	20	99					
17	RL Notorious	30	299					
18	TOTAL	F						
19	Highest Price		G					
20	Lowest price		H					

9.2 Merge and centre cell range A1–H1 and change the font to bold, Curlz MT 24 pt. (3)

9.3 Format the headings to light grey as indicated. (3)

9.4 Provide the formulae and/or function for cells marked with letters of the alphabet. Use cell references and absolute addresses where applicable. Copy the formulae as indicated to do the calculations.

A TOTAL PRICE = Price per item multiplied by quantity

B DISCOUNT = 10% of the cost price. Use absolute cell reference.

C TOTAL REDUCED PRICE = TOTAL PRICE minus DISCOUNT

D VAT = Total reduced price multiplied by 14%. Use absolute cell reference.

E INCOME = Total reduced price plus VAT

F Calculate the total for each column

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G Use a formula to calculate the highest price per item.

H Use a formula to calculate the lowest price per item.

(8 × 2) (16)

9.5 Display all amounts as currency with two decimals. (2)

9.6 Use the method that you are familiar with to insert horizontal and vertical lines. (2)

9.7 Print the document in A4 landscape orientation without row and column headings or the gridlines. (2)

[30]

QUESTION 10

10.1 Retrieve the document saved as QUEST 9 and immediately save it as QUEST 10. Also change QUESTION 9 to QUESTION 10 in the header. (2)

10.2 Display all formulae, hide column B, and adjust the column widths so that all formulae are visible. (6)

10.3 Print the document in A4 landscape orientation without row and column headings. The document should fit onto ONE A4 landscape page. (2)

[10]

TOTAL SECTION B: 80
GRAND TOTAL: 200

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