higher education & training

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

NATIONAL CERTIFICATE

COMPUTER PRACTICE: FARMING N4

(40903544)

16 November 2023 (X-paper)
09:00–12:00

Candidates are allowed 30 minutes to read the instructions in the question paper before the start of the examination.

This question paper consists of 16 pages and an answer sheet of 4 pages.

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DEPARTMENT OF HIGHER EDUCATION AND TRAINING
REPUBLIC OF SOUTH AFRICA

NATIONAL CERTIFICATE
COMPUTER PRACTICE: FARMING N4
TIME: 3 HOURS
MARKS: 200

Read the following instructions carefully before answering the questions. Invigilators will explain if necessary.

INSTRUCTIONS AND INFORMATION

1. The question paper consists of TWO sections:

   SECTION A: Theory (60 marks)
   SECTION B: Word processing (75 marks), Spreadsheet (65 marks)

   SECTION A (QUESTION 1–5) must be answered on the ANSWER SHEET (attached). The ANSWER SHEET must be placed in the front of the EXAMINATION FOLDER. 50 minutes should be spent on this section.

   SECTION B is done with word processing and spreadsheet programs on computer and approximately 130 minutes should be spent on this section.

2. In the event of a power failure or a computer or printer error/breakdown, the invigilator must make the necessary arrangements for the candidates to continue and the actual time lost should be added.

3. If there is a problem with certain printers, e.g. not printing special characters or not printing the watermark etc., a report must accompany the centre's ANSWERS.

4. A candidate may use a list of ASCII codes. A spelling checker may be used.

5. Each answer must be printed on ONE side of a separate sheet of paper ONLY (DO NOT PRINT BACK-TO-BACK). PRINTOUTS must be placed in the EXAMINATION FOLDER.

6. At the end of the examination session, all PRINTOUTS to be marked must be placed in the EXAMINATION FOLDER and handed to the invigilator. Only ONE PRINTOUT per question or subsection of a question may be handed in. PRINTOUTS not submitted for marking must be collected by the invigilator at the end of each session and destroyed at the end of the day. No PRINTOUTS whatsoever may be removed from the EXAMINATION ROOM or placed in the wastepaper bins.

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7. PRINTOUTS to be marked must be arranged in the same order as that of the questions in the QUESTION PAPER.

8. In SECTION B (Word processing) only Courier New 12 pt may be used, unless instructed differently.
In SECTION B (Spreadsheet) Calibri 11 pt or Arial 10 pt may be used, unless instructed differently.

9. Key in the QUESTION NUMBER as well as your EXAMINATION NUMBER for each question as indicated in the instructions. Answers without printed EXAMINATION NUMBERS will not be marked.

10. All work done on 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 through regular saving.

11. At the end of the examination session, each candidate must hand in the PRINTOUTS of the answers as well as the compact disk/memory stick with the saved answers (properly marked with the candidate's EXAMINATION NUMBER). If the candidate's work is saved on the hard disk/network, the invigilator(s) must copy the answers to a compact disk/memory stick and the answers must be deleted from the hard disk/network. These diskettes must be handed to the examination section for safekeeping for at least SIX months in case enquiries should be made by the Department of Higher Education and Training.

12. No QUESTION PAPER may be taken out of the examination room until at least ONE hour after the start of the last session. All QUESTION PAPERS must be handed in before candidates leave the EXAMINATION ROOM.

13. In the event of a QUESTION PAPER being written in more than one session, invigilators must ensure that all answers are backed up and removed from the hard disks/network before the candidates for the next session are allowed into the EXAMINATION ROOM.

14. The use of the internet is strictly prohibited. Even if a computer/terminal has internet access, you are not allowed to access the internet during the examination. Accessing the internet during the examination is considered as an IRREGULARITY.

15. No candidate may print/share his/her work for/with another candidate, make his/her compact disk/memory stick available to another candidate or access another candidates' work on the network or by means of e-mail and the internet or any other manner. Any attempt to access information from or transfer information to another candidate in whatever manner is considered an IRREGULARITY and against the rules and regulations as set out by the Department of Higher Education and Training. Should an irregularity be declared against a candidate, further steps will be taken and the candidate may be liable for suspension from current and future examinations.

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DO NOT TURN THE PAGE BEFORE THE INVIGILATOR INSTRUCTS YOU TO DO SO.

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SECTION A: THEORY

Answer QUESTIONS 1 to 5 on the ANSWER SHEET (attached).

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) on the ANSWER SHEET (attached).

1.1 Two components of a URL/Web address are …

A domain name and file path.
B domain name and blog path.
C digital name and file path.
D None of the above.

1.2 The purpose of a search engine is ...

A to make changes in an application software program.
B to allow sharing of files.
C used for searching information on the web.
D All of the above.

1.3 ICT stands for …

A Information cycle transfer.
B Information communication technology.
C Internet cyber technology.
D All of the above.

1.4 A good digital citizen is …

A a hacker.
B any person that spends all their free time on social media.
C a phisher.
D a person who uses digital media responsibly.

1.5 Output devices are used to produce output for the user, for example a …

A scanner.
B mouse and keyboard.
C printer.
D joystick.

1.6 Examples of different types of web browsers are …

A LinkedIn, Firefox, Opera.
B Internet Explorer, Google Chrome, Microsoft Edge.
C Google Chrome, WhatsApp, Facebook.
D Microsoft Edge, Instagram, Facetime.

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1.7 The information processing cycle includes the following steps in the following order …

A Input, processing, output, storage.
B Input, output, processing, storage.
C Storage, output, processing, input.
D Input, storage, processing, output.

1.8 A person who misuses the personal information of someone else is called …

A a phishing criminal.
B an identity thief.
C a bandwidth thief.
D a cybercriminal.

1.9 The following combination shortcut keys is used for the paste function.

A Ctrl + P
B Ctrl + C
C Ctrl + V
D Ctrl + A

1.10 A user will press the F1 key …

A to reveal formatting.
B to repeat last action.
C to change case.
D for help.

(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 (2.1–2.5) on the ANSWER SHEET (attached).

2.1 The internet is a worldwide system of computer networks that allows people to share information and communicate with each other.

2.2 A Wi-Fi router connects smart devices via wireless connection to the internet.

2.3 A web address identifies the physical location of a computer.

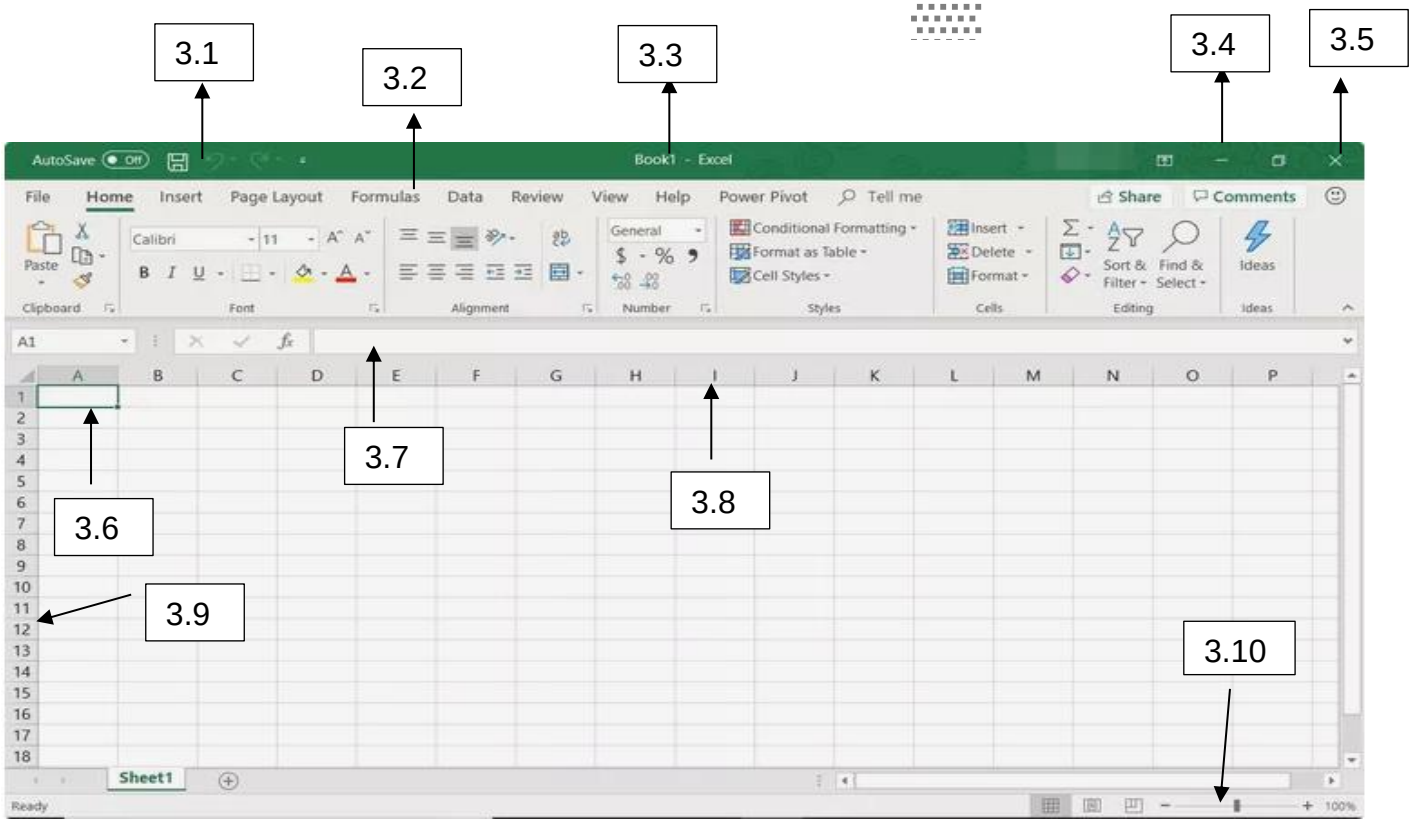
2.4 A computer's hardware can be defined as the physical components of a computer.

2.5 Users constantly moving between different screens and apps can cause attention deficit disorder (ADD).

(5 × 1) **[5]**

QUESTION 3

Name the following basic parts of a Microsoft Excel window:



(10 × 1) **[10]**

QUESTION 4

Write the following abbreviations in full next to the question number (4.1–4.5) on the ANSWER SHEET (attached).

4.1 ROM

4.2 LAN

4.3 OS

4.4 MB

4.5 CPU

(5 × 1) **[5]**

QUESTION 5

Answer the following questions on the ANSWER SHEET (attached).

5.1 List THREE positive and THREE negative impacts that mobile technologies can have on the emerging world. (3 × 2) (6)



5.2 Differentiate between *ROM* and *RAM*. (3 × 2) (6)

5.3 Define the following terms:

5.3.1 Hacker

5.3.2 Cyberbullying

5.3.3 Peripheral

5.3.4 Virus

(4 × 2) (8)



[20]

TOTAL SECTION A: 60

SECTION B: PRACTICAL

QUESTION 6: WORD PROCESSING [50]

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

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

1. Retrieve the document, VERTICAL FARMING, saved in the COMPUTER PRACTICE FARMING N4 folder.

2. Save the document as QUESTION 6.

3. Edit the document as indicated in the text and according to the instructions below.

4. As a HEADER, insert your EXAMINATION NUMBER (PC NO) left-aligned and QUESTION 6 in capital letters, right-aligned.

5. Ensure that all margins for the entire document are 2.54 cm/1".

6. The whole document should be left-aligned accept where indicated differently.

7. As a footer, insert the following text right-aligned in 8 pt, italics and bold:

   A future in which our food is grown in pockets of spaces.

8. Insert a double paragraph border and apply shading as indicated (Light Grey, Darker 10%).

   Advantages and Disadvantages of Vertical Farming

9. Insert all page breaks as indicated in the document.

10. Use the hyphenation function throughout the document.

11. Change the TWO paragraphs, “If you're a farming …” AND “Leveraging the Controlled …” into TWO parallel columns with a line between the columns and justify.

12. Insert a page border of your choice.

13. Insert page numbers at the bottom, left-aligned on every page.

14. Centre the contents of ONLY page TWO vertically.

15. Save the document as QUESTION 6, print and place the PRINTOUT in your EXAMINATION FOLDER.

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Vertical farming

UC, Bold, 18pt, centre, double underline

horizontally

Vertical farming is the practice of growing crops in vertically stacked layers. It often incorporates controlled-environment agriculture, which aims to optimize plant growth, and soilless farming techniques such as hydroponics, aquaponics, and aeroponics.

stet

Advantages and Disadvantages of Vertical Farming

Double paragraph border and apply shading (Light Grey, Darker 10%)

Column 1

If you're a farming or gardening enthusiast, there are a couple of things about vertical farming you should definitely know about. While there are many ways to define this novel mode of farming, in the simplest terms, Vertical Farming is a practice where food is produced in fairly inclined areas.
Unlike conventional farming where crops are planted at a single level, this unique method helps produce food in vertical and completely stacked layers that are also well-integrated into multiple structures like shipping containers or skyscrapers.

Column 2

Leveraging the Controlled Environment Agriculture Technology, this modern farming technique makes the most out of indoor farming methods. This method involves artificially controlling the temperature, the light, and the gases. That's also the reason why many farmers find Vertical Farming to bear multiple similarities with greenhouse farming. The main goal of this farming method is to maximize the output of crops in a small or cramped space.

--------page break-------

But what exactly are the benefits of Vertical Farming?

RA, Capitalise each word, underline

FEASIBILITY OF VERTICAL FARMING	
ADVANTAGES	**DISADVANTAGES**
☺ Limits Occupational Hazards	☹ Less Pollination
☺ Uses Space Optimally	☹ Technology Dependent
☺ Less Labour Costs	☹ Affects Communities

Insert a table with text as indicated, below the heading, "But what exactly..."
Size of the table: 2 equal columns and 5 rows
Merge and centre the first row horizontally and vertically
Column headings must be centred, upper case and bold.
Row height must be 1 cm.
Insert bullets as indicated: Wingdings 74 & 76

[50]

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QUESTION 7: WORD PROCESSING [25]

This section is done on a computer. Use font type Times New Roman 12 pt except where indicated differently.

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

1. Your farm is going to be used as venue for the launch of vertical farming and you are required to develop a flyer (similar to the one shown below) to be distributed as part of the advertisement.

2. Open a blank MS Word document.

3. As a footer, insert your EXAMINATION NUMBER (PC NO) left-aligned and QUESTION 7 in capital letters, right-aligned.

4. Ensure that all margins for the entire document are 2.54 cm/1".

5. Retrieve the .jpeg image, AEROPONICS, saved in the COMPUTER PRACTICE FARMING N4 folder.

6. Save the document as QUESTION 7, print and place the PRINTOUT in your EXAMINATION FOLDER.

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Insert wave shape; outline 3pt.

VERTICAL FARMING

UC, Algerian, 36pt, centre.

Insert Aeroponics picture.
9cm H
9cm W centre



Insert the following tab stops:
4.5 centre and
10cm left leader dots.
d/s

Venue ..... Hang – in – there farms

Date ..... 10 April 2023

Time 10:30

Topic ..... Feasibility and ease

Contact number. 0583595173

[25]

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QUESTION 8: SPREADSHEET

8.1 Create the following document in the spreadsheet program. Use the exact cell references as indicated. Do not type the row and column headings (you will be penalised if you use the wrong cells and for spelling errors).

	A	B	C	D	E	F
1	HANG - IN - THERE - FARMS					
2	EMPLOYEES	BASIC SALARY	PAYE	UIF	TOTAL DEDUCTIONS	NETT SALARY
3	ESAU B	8500				
4	MBONI Z	9000				
5	BARRON T	10500				
6	MAYONGO A	10750				
7	THUBELA P	12500				
8	LOMBAARD B	13750				

8.2 Use font Calibri (Body) 11 pt when creating the spreadsheet, except when instructed differently.

8.3 As a header, insert QUESTION 8 left-aligned in upper case and your EXAMINATION NUMBER (COMPUTER NO) right-aligned.

8.4 Use text wrapping to type column headings.

8.5 Adjust the column widths to fit the spreadsheet on ONE page. Do not use the 'Fit-to-one-page' option.

8.6 Save the spreadsheet as QUESTION 8.

8.7 Print the spreadsheet WITH row and column headings in portrait orientation and place the PRINTOUT in your EXAMINATION FOLDER.

[15]

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QUESTION 9: SPREADSHEET

9.1 Retrieve the spreadsheet that you saved as QUESTION 8.

9.2 Change QUESTION 8 in the header to QUESTION 9.

9.3 Save the spreadsheet as QUESTION 9.

9.4 Make all changes indicated on the spreadsheet and according to the instructions below.

9.5 Insert columns, rows and text as indicated in the spreadsheet.

9.6 Insert horizontal and vertical lines using the method you are familiar with.

9.7 Sort the EMPLOYEES column with corresponding figures alphabetically.

9.8 Insert formulas where the letters of the alphabet appear to do the following calculations:

A PAYE = BASIC SALARY × 15%
B UIF = BASIC SALARY × 1%
C TOTAL DEDUCTIONS = PAYE + UIF
D NETT SALARY = BASIC SALARY – TOTAL DEDUCTIONS
E TOTAL = THE TOTAL OF EACH COLUMN
F Determine the AVERAGE NETT SALARY
G Determine the HIGHEST DEDUCTION
H Determine the LOWEST UIF
I Determine the NUMBER OF EMPLOYEES

9.9 Copy the formulas to the other cells as indicated in the spreadsheet.

9.10 Display all monetary values as currency with TWO decimals.

9.11 Display NUMBER OF EMPLOYEES as integers.

9.12 Adjust the column width to fit the spreadsheet on ONE page in landscape orientation, but do not use the 'Fit-to-one-page' option.

9.13 Save the spreadsheet as QUESTION 9.

9.14 Print the spreadsheet in landscape orientation WITHOUT row and column headings and place the PRINTOUT in your EXAMINATION FOLDER.

[40]

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	A	B	C	D	E	F	G	H
1	HANG - IN - THERE - FARMS		*goudy stout 14pt, underline*					
2	*open row*						*merge & centre*	
3	EARNINGS FOR NOVEMBER 2022				*uc, bold, italics*			
4	*open row*							
5	EMPLOYEES	BASIC SALARY	PAYE	UIF	TOTAL DEDUCTIONS	NETT SALARY		*centre, bold, shading white bacground 25%*
6	ESAU B	8500	**A**	**B**	**C**	**D**		
7	MBONI Z	9000						
8	BARRON T	10500						
9	MAYONGO A	10750						
10	~~THUBELA P~~	~~12500~~					*Delete row*	
11	LOMBAARD B	13750						
12	TOTAL *UC, Bold*	**E**						
13	*open row*							
14	AVERAGE NETT SALARY					**F**		
15	HIGHEST DEDUCTION	*insert, uc*			**G**			
16	LOWEST UIF			**H**				
17	NUMBER OF EMPLOYEES		**I**					

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QUESTION 10: SPREADSHEET

10.1 Retrieve the spreadsheet that your saved as QUESTION 9.

10.2 Change the question number in the header to QUESTION 10.

10.3 Display the formulas.

10.4 Hide Column B.

10.5 Adjust the column widths so that all formulas are visible.

10.6 Save the spreadsheet as QUESTION 10 and print the spreadsheet WITHOUT row and column headings on ONE A4 landscape page. Place the PRINTOUT in your EXAMINATION FOLDER.

[10]

TOTAL SECTION B: 140
GRAND TOTAL: 200

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EXAMINATION NUMBER:

CENTRE NUMBER:

SECTION A

QUESTION 1

1.1 _____

1.2 _____

1.3 _____

1.4 _____

1.5 _____

1.6 _____

1.7 _____

1.8 _____

1.9 _____

1.10 _____

(10 × 2) **[20]**

QUESTION 2

2.1 _____

2.2 _____

2.3 _____

2.4 _____

2.5 _____

(5 × 1) **[5]**

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EXAMINATION NUMBER:

CENTRE NUMBER:

QUESTION 3

3.1 _____

3.2 _____

3.3 _____

3.4 _____

3.5 _____

3.6 _____

3.7 _____

3.8 _____

3.9 _____

3.10 _____

(10 × 1) **[10]**

QUESTION 4

4.1 _____

4.2 _____

4.3 _____

4.4 _____

4.5 _____

(5 × 1) **[5]**

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EXAMINATION NUMBER:

CENTRE NUMBER:

QUESTION 5

5.1

(3 × 2) (6)

5.2

(3 × 2) (6)

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EXAMINATION NUMBER:

CENTRE NUMBER:

5.3 _____

_____

_____

_____

_____

_____

_____

(4 × 2) (8)

[20]

TOTAL SECTION A: 60

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