higher education & training

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

N290**(E)**(M30)H
JUNE EXAMINATION

NATIONAL CERTIFICATE

DATA MANAGEMENT: FARMING N4

(4090454)

30 May 2016 (X-Paper)
09:00–12:00

TURN THE PAGE FOR THE INSTRUCTIONS.
YOU HAVE 25 MINUTES TO READ THE INSTRUCTIONS.

This question paper consists of 17 pages.

GENERAL STUDIES

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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

1. This question paper consists of two sections, namely:

   SECTION A: Theory (120 marks)
   SECTION B: Word processing/Text manipulation and spreadsheet as well as database (80 marks)

   SECTION A must be answered in the ANSWER BOOK and must be placed in the FRONT of the folder.

   Approximately 2 hours should be spent on this section.

   SECTION B is done on the computer with the aid of the word-processing, spreadsheet and database program. The printouts must be correctly numbered and both the examination number and the question number must be printed at the top of each printout. Handwritten examination 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 in.

   Approximately 1 hour should be spent on this section.

   NO QUESTIONS WITH HANDWRITTEN EXAMINATION NUMBERS, WITHOUT THE SIGNATURE OF THE INVIGILATOR, WILL BE MARKED.

2. The time allocated for the question paper is 3 hours.

3. NO additional printing time is 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, for example does not print ë, a report must be sent with the centre's ANSWER SHEETS.

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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. Do NOT staple ANSWER SHEETS together. Marks will be subtracted for printing on both sides of the paper as well as for stapling of ANSWER SHEETS.

8. 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 put into wastepaper 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.

9. Printouts to be marked must be arranged in the same sequence as that of the questions in the examination paper. Marks will be subtracted for ANSWER SHEETS not arranged in the correct sequence.

10. 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 a letterhead is supplied.

11. In SECTION B of the question paper only a 10 pitch/12 pt may be used, unless otherwise instructed or where a different letter size is required or where it is necessary in the case of a spreadsheet to use a smaller letter size to fit an answer on one page. In the word-processing section margins of 10°/2.54 cm/1" should be used, unless otherwise instructed.

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 responsibility of candidates 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 the CD/memory stick with the saved answers (properly marked with the candidate's examination number on the cover). (These CDs/memory sticks must be handed to the examination section for safekeeping for one year in case enquiries should be made by the examiner/moderator and superintendents of examination.)

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15. Please note that no paper may be taken out of the examination room until at least 1 hour after the commencement of the last session. All papers must
16. consequently be handed in. These may be returned to a candidate on completion of the examination.

In the event of an examination paper being examined in more than one session, invigilators must ensure that all answers of candidates are removed
17. from the hard disks or the network before candidates for the next session are allowed into the room.

NO candidate may print his/her work for another candidate, make his/her CD/memory stick 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 viewed in a very serious light.

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QUESTION PAPER

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

Answer the questions in ALL the sections and place your answers in the cover provided. The suggested time to be spent on the different sections, are as follows:

SECTION A: 2 HOURS
SECTION B: 1 HOUR

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SECTION A: THEORY

QUESTION 1

1.1 Indicate whether the following statements are TRUE or FALSE. Choose the answer and write 'true' or 'false' next to the question number (1.1.1–1.1.10) in the ANSWER BOOK. Correct the statement if it is FALSE.

1.1.1 Ink-jet printers produce high-quality print and graphics and are quiet because the paper is not struck as it is by dot-matrix printers.

1.1.2 An ink cartridge has anywhere from 50 to several hundred small ink nozzles, each less than half the width of a human hair.

1.1.3 The speed of impact printers with movable print heads is rated in characters per second (cps).

1.1.4 Dot-matrix printers are the least expensive printers but they are less frequently used because they do not offer a high-quality output.

1.1.5 A monitor looks like a television and consists of a display surface and a plastic or metal case to house the electronic components.

1.1.6 Entrepreneurship refers to those individuals within communities who take the lead and responsibility, as well as the risk to combine the factors of production to produce the goods that are in demand.

1.1.7 Printed output is called hard copy.

1.1.8 Output that is displayed on a screen is called soft copy.

1.1.9 Output is data that have been processed into a useful form called information that can be used by a person or a machine.

1.1.10 Video is input into the computer in a process called video capture, which involves converting analogue video signals into digital format and then compressing and storing the digital video.

(10 × 2) (20)

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1.2 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 (1.2.1–1.2.10) in the ANSWER BOOK.

1.2.1 … is used to erase a file or files.

A Move
B Disk copy
C Delete
D Rename

1.2.2 An old diskette is formatted to … information stored there.

A repair
B upgrade
C delete
D group

1.2.3 … is/are useful to specify a group of files when searching for a group of files.

A A note of exclamation (!)
B A question mark
C An asterisk (*)
D Two question marks

1.2.4 This printer is an impact printer:

A Ink-jet printer
B Thermal printer
C Matrix printer
D Laser printer

1.2.5 The speed of the CPU is measured in:

A Kilobytes
B Gigabytes
C Megahertz
D Bytes

1.2.6 When you move your fingertip across the pad, the pointer on the screen moves in the same direction.

A Mouse
B Trackball
C Touch pad
D Prop-out mouse

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1.2.7 The following is NOT an example of removable storage media:

A Tape cartridge
B Diskette
C Hard disk
D Flash disk/Memory stick

1.2.8 A … is a small digital device that can be used to send live video over the internet or other networks.

A digitiser
B voice-recognition device
C webcam
D speech synthesiser

1.2.9 The … is usually fairly limited and forms only a small part of the total memory. It is not available for storing data.

A RAM
B ALU
C CPU
D ROM

1.2.10 The … can be considered the heart (and the brain) of the computer.

A ROM
B ALU
C CPU
D RAM

(10 × 2) (20)

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1.3 Choose an item from COLUMN B that matches a description in COLUMN A. Write only the letter (A–G) next to the question number (1.3.1–1.3.5) in the ANSWER BOOK.

COLUMN A		COLUMN B
1.3.1	A peripheral with a lever, which is capable of moving in different directions	A copyright B piracy
1.3.2	A computer virus	C firewall
1.3.3	Used for permanent storage of text, images and sound	D viruswall E Trojan horse
1.3.4	To detect and remove viruses via the internet	F CD-ROM disks
1.3.5	Illegal and unethical copying of software	G joystick

(5 × 2) (10)

1.4 Give ONE word/term for each of the following descriptions. Write only the word/term next to the question number (1.4.1–1.4.5) in the ANSWER BOOK.

1.4.1 This refers to programs designed to allow the computer to manage its own resources and include operating systems, language translators, utility programs and user interface.

1.4.2 This is a device that reads text, images or graphics (in other words bar codes) on paper and converts them into machine-readable characters.

1.4.3 Arithmetic calculations, in other words addition, subtraction, multiplication and division, are done.

1.4.4 These computers can run on batteries as well as main power.

1.4.5 They produce characters by means of a mechanism that strikes the paper physically.

(5 × 2) (10)
[60]

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QUESTION 2

2.1 Schematically, a computer can be represented as in DIAGRAM 1 below. Complete the following diagram by filling in the missing word(s). Write only the word(s) next to the question number (2.1.1–2.1.6) in the ANSWER BOOK.

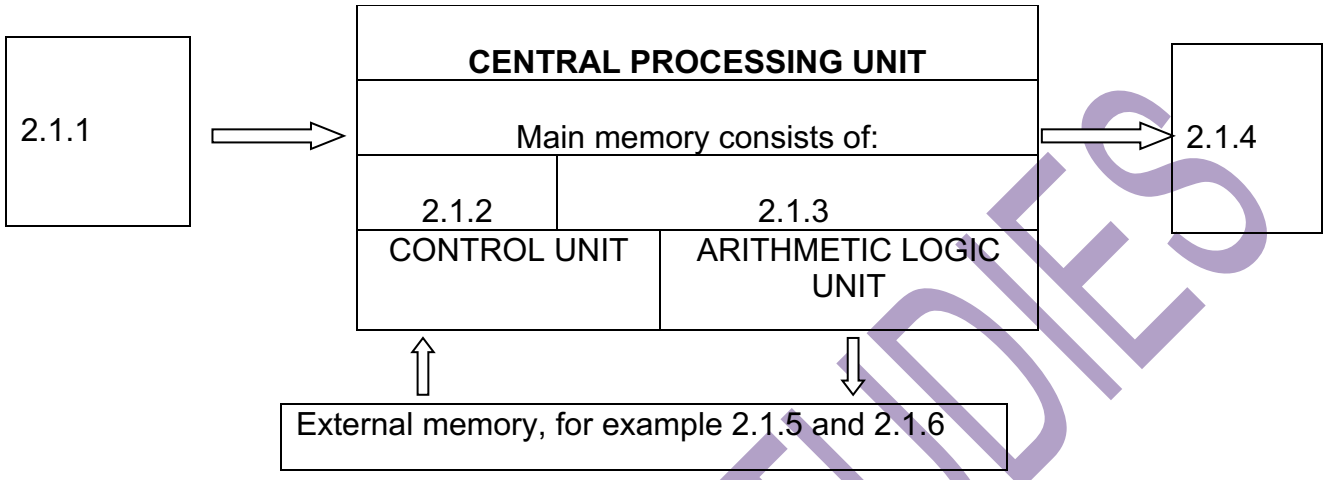

DIAGRAM 1

(6 × 2) (12)

2.2 Answer the following questions on viruses:

2.2.1 What is a computer virus? Explain in full. (4)

2.2.2 State FOUR precautions you will take against viruses. (4)

2.2.3 Name TWO kinds of virus. (2)
[22]

QUESTION 3

Define the following terms:

3.1 Ergonomics

3.2 User name

3.3 Password

3.4 Twitter

3.5 Electronic mail

(5 × 2) **[10]**

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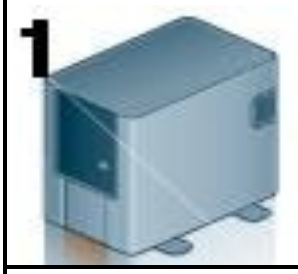
QUESTION 4

Identify the components below. Write only the word(s) next to the question number (4.1–4.6) in the ANSWER BOOK.

		
4.1	4.2	4.3
		
4.4	4.5	4.6

(6 × 2) **[12]**

QUESTION 5

What is the meaning of the following computer terminology?

5.1 MHz

5.2 UPS

5.3 SCSI

5.4 IDE

5.5 RAM

5.6 LAN

5.7 FAT

5.8 MZR

(8 × 2) **[16]**

TOTAL SECTION A: 120

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INSTRUCTIONS AND INFORMATION

1. Read ALL the questions carefully.
2. Answer ALL the questions. Use appropriate application programs and include your printouts in your folder.
3. Number the answers correctly according to the numbering system used in this question paper.
4. The time indicated at the beginning of each section is a guideline to finish the question paper in time.
5. The time allocated for this question paper includes printing time.
6. It is your responsibility to save your work at regular intervals to prevent loss of keyed-in data during a power failure. No additional time is allowed to complete lost work.
7. In the event of a computer or printer defect, the invigilator will make the necessary arrangements for you to continue with the examination and the actual time lost will be allowed additionally.
8. Spellcheck may be used.
9. Examination and centre numbers must be written correctly on the examination folder and the software version used must be indicated at the top of the cover page, for example MS Office 2003.
10. Ensure that every printout displays the question number and examination number as instructed.
11. Examination numbers in writing are NOT acceptable.
12. Marks will NOT be awarded for any printouts without an examination number.
13. Printouts to be marked must be arranged in the same order as that of the questions in the question paper. Only one printout per question may be handed in.
14. Each answer must be printed on a separate sheet of paper. Use only one side of the paper.
15. You are not allowed to take any learning materials (notes, textbooks or handouts) into the examination venue.

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SECTION B: WORD PROCESSING

APPROXIMATELY 40 MINUTES

QUESTION 1A

1.1 Use MS Word to key in the document exactly as it appears below.

1.2 Set the font type to Arial, size 12.

1.3 Insert your EXAMINATION NUMBER (left) and QUESTION 1A (right) as a header.

1.4 Set the left margin at 2.54 cm.

1.5 Justification must be left.

1.6 Proofread and save the document as QUEST 1A.

1.7 Print the document and place the printout in your examination folder.

[7]

The Flower Shop

Quality Fresh Flowers at the BEST Price!

You have an occasion – we have the flowers!

Fresh Flowers
Gift Baskets
Wedding Planning
Dried Flowers
Potted Plants

Hours:
Monday–Friday: 08:00 till 17:00
Saturday: 09:00 till 14:00

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E-mail: flowers@cyber.co.za

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QUESTION 1B

1.1 Open the file saved as QUEST 1A.

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

1.3 Change QUESTION 1A in the header to QUESTION 1B.

1.4 Change the main heading 'The Flower Shop' to Baskerville Old Face, size 20, upper case and bold.

1.5 Apply bullets of your choice to the list of products starting with 'Fresh Flowers'.

1.6 Enter the text 'Special Birthday Baskets' at the end of the list of products.

1.7 Underline the words 'Hours', 'Phone/Fax' and 'E-mail'.

1.8 Change the line spacing of the whole document to double line spacing.

1.9 Insert a picture with any kind of flowers and change the size to any size between 4 cm x 4 cm.

1.10 The wrap text must be SQUARE. Place the picture at the top right corner of the document.

1.11 Apply a 3 pt border to the picture.

1.12 Print the document on one page and place the printout in your examination folder.

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SPREADSHEET

APPROXIMATELY 32 MINUTES

QUESTION 2A

Create a new spreadsheet in the correct program and key in the following document. Do not key in the row and column headings. It was used to indicate which cells must be used. Candidates will be penalised if the incorrect cells are used.

2.1 Insert your EXAMINATION NUMBER (left) and QUESTION 2A (right) as header.

2.2 Use the font type Arial, size 12.

2.3 Adjust the column widths to fit the content where necessary.

2.4 Insert a horizontal line as indicated.

2.5 Save the document as QUEST 2A.

2.6 Print the spreadsheet on one A4 portrait page without row and column headings (borders) and place the printout in your examination folder.

	A	B	C
1	EXCELLENCE STUDENT FINANCE AGENCIES		
2			
3	INCOME AND EXPENDITURE STATEMENT		
4	FOR THE MONTHS JUNE/JULY 2015		
5			
6	MONTH	JUNE	JULY
7			
8	INCOME		
9	Services rendered	13800	10750
10	Book sales	1200	1590
11	Other income	650	580
12			
13	TOTAL INCOME		
14			
15	EXPENSES		
16	Salaries	2400	
17	Stationary	40	200
18	Telephone	60	130
19	Rent	1230	1230
20			
21	TOTAL EXPENSES		
22			
23	PROFIT		

[15]

STUDIES

QUESTION 2B

2.1 Open the spreadsheet QUEST 2A.

2.2 Change QUESTION 2A in the header to QUESTION 2B.

2.3 Edit the spreadsheet according to the following instructions and as indicated on the spreadsheet.

2.4 Change the font type of the main heading to Forte, size 16.

2.5 Change the appearance of rows 3, 4, 6, 8, 13, 21 and 23 to bold and italics.

2.6 Calculate the TOTAL INCOME for JUNE and JULY.

2.7 Calculate the July SALARIES increased by 10%.

2.8 Calculate the TOTAL EXPENSES.

2.9 Use the correct method to calculate the PROFIT.

2.10 Format all monetary values to display currency (R with two decimals).

2.11 Change the column width to ensure that all the information is readable on one A4 page. Do not use the 'fit to page' function.

2.12 Save the spreadsheet as QUESTION 2B.

2.13 Make a printout with row and column headings but without gridlines.

[35]

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	A	B	C
1	**EXCELLENCE STUDENT FINANCE AGENCIES**		
2			
3	**INCOME AND EXPENDITURE STATEMENT**		
4	**FOR THE MONTHS JUNE/JULY 2015**		
5			
6	**MONTH**	**JUNE**	**JULY**
7			
8	**INCOME**		
9	Services rendered	13800	10750
10	Book sales	1200	1590
11	Other income	650	580
12			
13	**TOTAL INCOME**	?	?
14			
15	EXPENSES		
16	Salaries	2400	?
17	Stationary	40	200
18	Telephone	60	130
19	Rent	1230	1230
20			
21	**TOTAL EXPENSES**	?	?
22			
23	**PROFIT**	?	?

[50]

TOTAL SECTION B: 80
GRAND TOTAL: 200

GENERA

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