higher education & training

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

MARKING GUIDELINE

NATIONAL CERTIFICATE

DATA MANAGEMENT: FARMING N4

24 May 2021

This marking guideline consists of 9 pages.

Copyright reserved

SECTION A (THEORY)

QUESTION 1

1.1 C
1.2 B
1.3 D
1.4 B
1.5 B
1.6 A
1.7 B
1.8 D
1.9 C
1.10 A

(10 × 2) **[20]**

QUESTION 2

2.1 True
2.2 True
2.3 True
2.4 True
2.5 False
2.6 True
2.7 False
2.8 False
2.9 True
2.10 True

(10 × 2) **[20]**

QUESTION 3

3.1 E
3.2 A
3.3 B
3.4 D
3.5 C

(5 × 2) **[10]**

QUESTION 4

4.1	4.1.1	Microsoft Windows XP	(1)
	4.1.2	Intel Core 2	(1)
	4.1.3	2,13 GHz	(1)
	4.1.4	2,50 GB	(1)
	4.1.5	PCdV	(1)

Copyright reserved

4.2 The student should use his/her own knowledge on how to incorporate a computer into the present farming setup, e.g. preparing employees' salary slips, recording stock, recording daily readings, researching, communicating. (5)

4.3
- Keyboard
- Printer
- Mouse
- Central processing unit
- Cable
- Speaker
- Hard drive (Any 5 × 1) (5)

4.4
- The storage capacity of a hard disk is more than that of a diskette drive.
- A hard disk drive stores and retrieves data faster than a diskette drive.
- A hard disk will not be damaged as easily as a diskette.
- A hard disk does not have to be inserted into the computer every time.
- New programs cannot be loaded from a diskette. (5 × 2) (10)

[25]

QUESTION 5

5.1
- Activates the computer
- Allows us to communicate with the computer – in other words, it is a group of programs that acts as a 'translator' between the computer and humans
- Controls the functioning of the computer by linking with the keyboard, monitor and printer; thus enabling the computer to run application programs
- Transfers information between the memory and the disk
- Controls the management of files on the diskette or hard disk enabling the creation, deletion, copying and renaming of files (Any 5 × 2) (10)

5.2
5.2.1 MS-DOS, Windows 8, Blackberry, Android
5.2.2 Word processing, spreadsheet, database
5.2.3 PASCAL, JAVA, ADA, Visual Basic, Clarion
(3 × 2) (6)

5.3
- Controlling the cursor
- Selecting
- Double click
- Right click
- Drag and drop (Any relevant 5 × 1) (5)

[21]

QUESTION 6

6.1
- Accessing files infected with a virus
- Booting the computer from an infected hard disk
- Downloading software
- Sharing disks on computers and networks
- Not installing an antivirus program
- Checking all disks and downloaded files by scanning with an antivirus program
- Opening any links or strange email attachments (Any 5 × 1) (5)

6.2
- File virus
- Boot-sector virus
- Worm
- Trojan horse
- Spyware
- Code Red
- I-worm.MTX (Any 5 × 1) (5)

[10]

QUESTION 7

7.1 A program or hardware device that filters information coming through the internet connection into a private network or computer system

7.2 An electronic machine that receives data from input devices, processes it, stores it and sends it to output devices

7.3 Taking someone else's ideas or information and present it as your own

7.4 A program used for typing, e.g. letter, advertisement, applications, etc.

7.5 A program used to manipulate and analyse numbers

7.6 Larger commercial computers able to process an enormous amount of data at a remarkably high speed

7.7 The exclusive legal right to print, reproduce, publish and sell an original program, music act

(7 × 2) **[14]**

TOTAL SECTION A: 120

SECTION B (PRACTICAL)

QUESTION 8: WORD PROCESSING

8.1 Examination number ***Question 8✓✓***

THE ORIGINAL FLIP-TOP VIAL ***8.2✓✓✓✓***

Protect the farmer and buyer by using leak-proof, airtight and aseptic sample vials. ***8.3✓✓***

The research ***8.4✓✓***

During the development and testing of mastDecide at the University of Hannover in Germany, four different incubation time schemes were analysed in terms of sensitivity and specificity, as well as negative and positive predictive values.

Researchers also evaluated apparent and true prevalence compared with the conventional microbiological investigation results for 251 clinical mastitis milk samples from 11 dairy farms located in northern Germany.

Evaluation of the tube test results after 14 hours of incubation at a temperature of 37 °C 8.5✓✓results in sensitivity values of 83,6%, 72,2%, and 70,7% respectively for the three groups (gram-positive cocci, coliform bacteria and no growth or further pathogens). The same tube tests delivered specificity values of 94,1%, 83,3% and 90,8% respectively. 8.6✓✓

Intermammary antibiotic administration is not advisable in certain cases of clinical mastitis, especially those caused by coliform bacteria and yeasts.

8.7 Page break✓✓

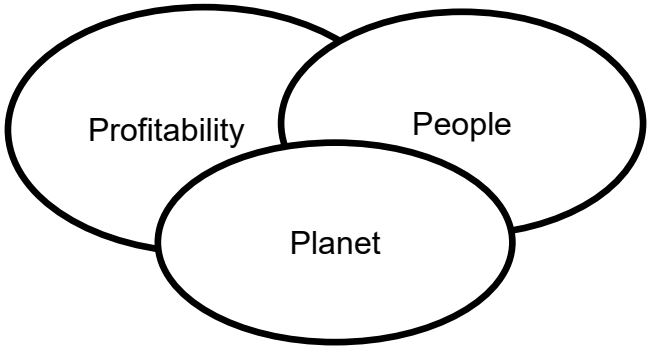
CONCLUSION ***8.8✓✓✓***

8.9 Two columns created✓✓

Researchers concluded that mastDecide has the potential to provide a new option for an evidence-based mastitis therapy, with the aim of reducing the future usage of antimicrobials in dairy cows in order to contribute to decreased antimicrobial resistance.

'mastDecide is a patented cow-side test invented at the University of Hannover that allows evidence-based treatment decisions within milking,' says Dr Zieger. 'It is faster than any other comparable test, is easy to apply and delivers highly accurate results.'

8.10 Shapes with information inserted✓✓✓✓✓✓



8.11 Page numbering starting from 6✓✓
8.12 Print✓ **[30]**

QUESTION 9A: SPREADSHEET

9.1 Correct program and accuracy✓✓✓✓✓

	A	B	C	D	E
1	TAX INVOICE		Invoice no.:	C0008	
2	CASH CROP FARM		Date:	39234	
3	PO BOX 1020		Tel. No.:	015-9637000	
4	POLOKWANE		Payment Method:	Cash	
5					
6	Name:	Mr Munonde B			
7	Address:	PO Box 134			
8	Town:	SONGWANE			
9	Code:	0920			
10					
11	Units	Title	Unit Price	Amount	
12					
13	3	Brinjals	91,99		
14	4	Runner beans	137,99		
15	2	Sunflower	139,14		
16	1	ASGROW	102,34		
17	5	Pioner Seed	91,99		
18	4	Lucerne	102,99		

9.2 Examination number and Question 9A on header✓✓
9.3 Columns adjusted✓
9.5 Print with row and column headings✓✓ **[10]**

QUESTION 9B: SPREADSHEET

TAX INVOICE	**Invoice no.:**	**C0008**
CASH CROP FARM	**Date:**	**39234**
PO BOX 1020	**Tel. No.:**	**015-9637000**
POLOKWANE	**Payment Method:**	**Cash**

Name: *Mr Munonde B*
Address: *PO Box 134*
Town: *SONGWANE*
Code: *0920*

UNITS	TITLE	UNIT PRICE	AMOUNT
3	Brinjals	R 91,99	R 275,97
4	Runner beans	R 137,99	R 551,96
2	Sunflower	R 139,14	R 278,28
1	ASGROW	R 102,34	R 102,34
5	Pioner Seed	R 91,99	R 459,95
4	Lucerne	R 102,99	R 411,96
		Total	R 2 080,46
		Discount	R 104,02
		Insurance	R 62,41
		Subtotal	R 2 038,85
		VAT	R 305,83
		Amount Due	R 2 344,68

9.6 Question number changed to 9B✓
9.7 Row 4 bold✓✓
9.8 Row 6–9 italics✓✓
9.9 Row 11 Castellar font and shading applied✓✓✓✓
9.10 Information correctly inserted✓✓✓
9.11 A Correct calculation✓✓
B Correct calculation✓✓
C Correct calculation✓✓
D Correct calculation✓✓
E Correct calculation✓✓
F Correct calculation✓✓
G Correct calculation✓✓
9.12 R sign✓✓
9.13 Print in landscape✓✓ **[30]**

QUESTION 9C: SPREADSHEET

	A	B	C	D
1	**TAX INVOICE**		**Invoice no.:**	**C0008**
2	**CASH CROP FARM**		**Date:**	**39234**
3	**PO BOX 1020**		**Tel. No.:**	**015-9637000**
4	**POLOKWANE**		**Payment Method:**	**Cash**
5				
6	*Name:*	*Mr Munonde B*		
7	*Address:*	*PO Box 134*		
8	*Town:*	*SONGWANE*		
9	*Code:*	*0920*		
10				
11	UNITS	TITLE	UNIT PRICE	AMOUNT
12				
13	3	Brinjals	91,99	=C13*A13
14	4	Runner beans	137,99	=C14*A14
15	2	Sunflower	139,14	=C15*A15
16	1	ASGROW	102,34	=C16*A16
17	5	Pioner Seed	91,99	=C17*A17
18	4	Lucerne	102,99	=C18*A18
19			Total	=SUM(D13:D18)
20			Discount	=D19*5%
21			Insurance	=D19*3%
22			Subtotal	=D19-D20+D21
23			VAT	=D22*15%
24			Amount Due	=D22+D23

9.15 All formulae correct✓✓✓✓✓✓
9.16 Question number changed to 9C✓
9.17 Column adjusted✓
9.18 Print in portrait✓✓ **[10]**

TOTAL SECTION B: 80
GRAND TOTAL: 200

Copyright reserved