higher education & training

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

MARKING GUIDELINE

NATIONAL CERTIFICATE

DATA MANAGEMENT: FARMING N5

14 NOVEMBER 2019

This marking guideline consists of 11 pages.

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SECTION A (THEORY)

QUESTION 1

1.1	1.1.1	A		
	1.1.2	C		
	1.1.3	D		
	1.1.4	B		
	1.1.5	C		
	1.1.6	B		
	1.1.7	A		
	1.1.8	B		
	1.1.9	C		
	1.1.10	D		
			(10 × 2)	(20)
1.2	1.2.1	True		
	1.2.2	False		
	1.2.3	True		
	1.2.4	False		
	1.2.5	True		
	1.2.6	False		
	1.2.7	True		
	1.2.8	True		
	1.2.9	True		
	1.2.10	False		
			(10 × 2)	(20)
1.3	1.3.1	E		
	1.3.2	G		
	1.3.3	F		
	1.3.4	H		
	1.3.5	B		
	1.3.6	D		
	1.3.7	C		
			(7 × 1)	(7)

1.4 1.4.1 Software offered for free; it was created to be available for everyone.

1.4.2 Education where online computer technology is used as the medium of instruction

1.4.3 Painful hand injury caused by too many hours of keying

1.4.4 Allows users to easily retrieve only the latest information, for example news headlines from regularly used websites

1.4.5 Light-sensitive pen used by engineers and architects to create diagrams or graphic drawings on the screen

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1.4.6 A website with regular entries of commentary, descriptions of events or videos

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

(7 × 2) (14)

1.5 1.5.1 Wireless Local Network
1.5.2 Graphical User Interface
1.5.3 Computer Vision Syndrome
1.5.4 Universal Serial Bus
1.5.5 Repetitive strain or stress injury

(5 × 2) (10)
[71]

QUESTION 2

2.1
- Right-click on the recycling bin. ✓
- Select open and click. ✓
- Select the file you want to recover. ✓
- Right-click on it and select restore. ✓✓ (5)

2.2 2.2.1 The specific file name could not be found.

2.2.2 There is not enough space on the disk to save the file.

2.2.3 The command or file name is not valid.

(3 × 2) (6)

2.3
- Reduce injuries, errors, defects and costs.
- Reduce employee absence.
- Improve satisfaction.
- Improve productivity.
- Reduce workplace stress. (5 × 2) (10)

[21]

QUESTION 3

3.1
- Root folder – keeps record of all files on the disk.
- File allocation table – where record is kept of the position where files are stored.
- Boot record – used by Windows to boot the system. (3 × 2) (6)

3.2 A process done by the computer user to bring the scattered file parts back together so that it will be easy to retrieve the file. (2)
[8]

TOTAL SECTION A: 100

SECTION B: PRACTICAL

QUESTION 4: SPREADSHEET

EXAM NO. QUESTION 4.1✓✓

NO ROW AND COL HEADINGS✓

	A	B	C	D	E	F
1	THE WILLOW TRADERS					
2						
3		2013	2014	2015	2016	2017
4	**Income**					
5	Units sold	100000				
6	Unit Price	3				
7	**Gross Revenue**					
8						
9	**Fixed Costs**					
10	Production facility	50000				
11	Adminstration	25000				
12	Total Fixed Costs					
13						
14	**Valuable cost**					
15	Unit manufacturing.cost	1,5				
16	Variable manufacturing.cost					
17						
18	**Earnings before taxes**					

WRAP TEXT✓

FIGURE 1

PRINT A4 LANDSCAPE ✓

(5)

	A	B	C	D	E	F	G
1	A4,A7,A14,A18 All Bold,Italics ✓✓✓		THE WILLOW TRADERS		Merged, size, font ✓✓✓✓		
2							
3		2013	2014	2015	2016	2017	
4	**Income**						
5	Units sold	R100 000,00	R110 000,00	R121 000,00	R133 100,00	R146 410,00	
6	Unit Price	R3,00	R3,15	R3,31	R3,47	R3,65	
7	**Gross Revenue**	R300 000,00	R346 500,00	R400 207,50	R462 239,66	R533 886,81	
8							
9	**Fixed Costs**						
10	Production facility	R50 000,00	R54 000,00	R58 320,00	R62 985,60	R68 024,45	
11	Adminstration	R25 000,00	R26 250,00	R27 562,50	R28 940,63	R30 387,66	
12	Total Fixed Costs	R75 000,00	R80 250,00	R85 882,50	R91 926,23	R98 412,10	
13							
14	**Valuable cost**						
15	Unit manufacturing.cost	R1,50	R1,65	R1,82	R2,00	R2,20	
16	Variable manufacturing.cost	R150 000,00	R181 500,00	R219 615,00	R265 734,15	R321 538,32	
17							
18	**Earnings before taxes**	R75 000,00	R84 750,00	R94 710,00	R104 579,29	R113 936,38	
19			CALCULATIONS				
20	Row 18 shading✓✓		A ✓✓	F✓✓	R sign ✓✓✓		
21			B✓✓	G✓✓			
22			C✓✓	H✓✓			
23			D✓✓	I✓✓			
24			E✓✓				
25							

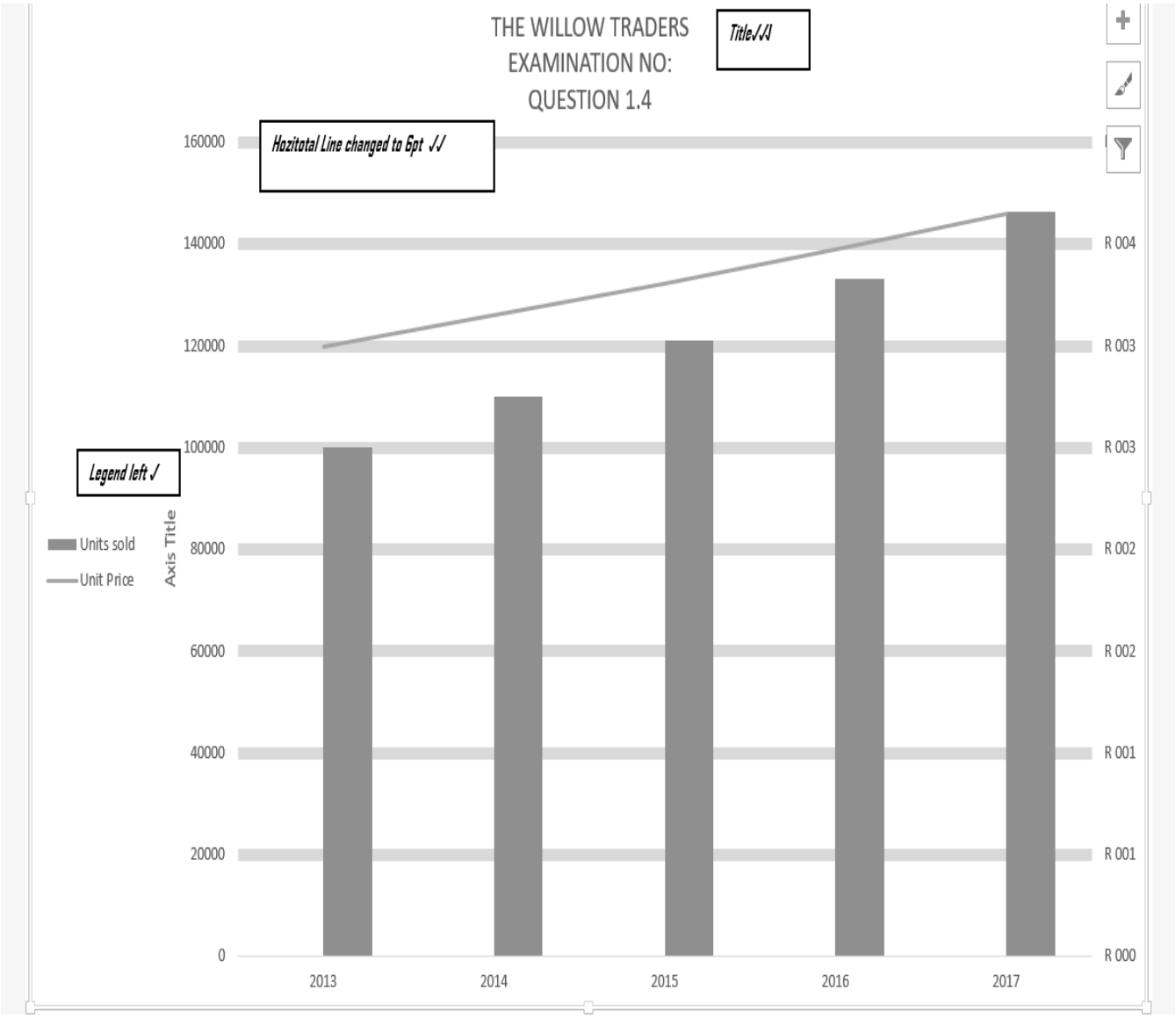
HORIZONTAL AND VERTICAL LINES✓✓

PRINT ON LANDSCAPE WITHOUT ROW AND COLUMN HEADINGS: 1 PAGE ✓✓

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CHANGE QUESTION NO TO 4.3 ✓

	A	B	C	D	E	
1	THE WILLOW TRADERS					
2						
3		2013	2014	2015	2016	2017
4	***Income***					
5	Units sold	100000	=B5+(B5*10%)	=C5+(C5*10%)	=D5+(D5*10%)	=E5+(E5*10%)
6	Unit Price	3	=B6+(B6*5%)	=C6+(C6*5%)	=D6+(D6*5%)	=E6+(E6*5%)
7	***Gross Revenue***	=B6*B5	=C6*C5	=D6*D5	=E6*E5	=F6*F5
8						
9	***Fixed Costs***					
10	Production facility	50000	=B10+(B10*8%)	=C10+(C10*8%)	=D10+(D10*8%)	=E10+(E10*8%)
11	Adminstration	25000	=B11+(B11*5%)	=C11+(C11*5%)	=D11+(D11*5%)	=E11+(E11*5%)
12	Total Fixed Costs	=SUM(B10:B11)	=SUM(C10:C11)	=SUM(D10:D11)	=SUM(E10:E11)	=SUM(F10:F11)
13						
14	***Valuable cost***					
15	Unit manufacturing.cost	1,5	=B15+(B15*10%)	=C15+(C15*10%)	=D15+(D15*10%)	=E15+(E15*10%)
16	Variable manufacturing.cost	=B15*B5	=C15*C5	=D15*D5	=E15*E5	=F15*F5
17						
18	***Earnings before taxes***	=B7-B12-B16	=C7-C12-C16	=D7-D12-D16	=E7-E12-E16	=F7-F12-F16
19						
20	*Header changed ✓*	*Formulae correct ✓✓*	*Column width √*	*Print √*	TOTAL MARKS: (5)	
21						



(5)
[55]

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QUESTION 5

EXAM NO AND Question No: on Header= √√

CALF FEEDING

COMPUTERISED FARMING TECHNOLOGY

Computerised farming technology includes moisture sensors, smart irrigation systems, terrain contour mapping and self-driven and GPS – enabled tractors, all of which contribute to improve farming sustainability.

IoT solutions enable farmers to control water troughs and feeders and even management the irrigation system for the pastures. Machines are available that signal when stalls need to be cleaned.

Courier new font =√
Full Justification=√

Various types of wearables for cows allow dairy farmers to continuously monitor the health, location and behavior of all their cows at the same time. The wearables collect information about the animals' temperature, activity, behavior (feeding, sleeping, lameness, gait) and milk production levels and help farmers keep track of which cows have already been milked. Dairy farmers use the information from the trackers to determine when cows are in heat and ready for insemination and to detect any deviation from the norm. This makes the timely treatment of illness or abnormalities possible, which in turn impossible cow health and comfort.

All types of sensors are available to farmers. Drones can be fitted with multispectral sensors that indicate how crops should be watered. The same sensor mounted on a tractor that's fertilizing soil can regulate the application of nitrogen so that the right amount is applied to maintain soil health. In-field moisture sensors in the ground can help farmers create customized irrigation systems for crops and pastures based on soil moisture and temperature. This type of technology can help farmers become more sustainable by managing the level and frequency of irrigation.

All subheading u/c= √
All Bold =√

EQUIPMENT FOR HAPPY COWS

Cows love cow brushes, which stimulate blood circulation by their rotations and movements. According to some farmers, their cows line up for their turn to use this technology.

Rotary milking parlours make sanitization of udders efficient and accessible and misting or evaporative systems keep cows cool and prevent heat stress.

Two columns with a line =√√
Bullets inserted =√√

MILKSHUTTLE	URBAN ALMA PRO
• Physical ease of work: relieves your back • 3 big wheels for any terrain • Strong electric drive • Exact and simple dosing out of the milk • Four practical sizes	• Latest technology with a user friend touchscreen • Future proof • Calf health reports round the clock • Only model with a closed loop system • Milk temperature is controlled by 3 sensors • Fully automatic cleaning system

Triple lines paragraph boarder =√√
Shading = √√

CONCLUSION

Agtech data and technology equip farmers to work smart and produce the best quality products efficiently while continually improving the responsible management of animals and the environment.

Print = √

[20]

QUESTION 6

THE WILLOW TRADERS | QUESTION 3 QUERY EXAMINATION NO

ITEM NUMBER	PRODUCTION	SALES MAN	COST PRICE	NUMBER ORDERED	COMMISSION PAID	SALES DATE
1	Milk	James	R7,99	85	R33,96	2017/08/14
2	Juice	Malatji	R9,50	120	R57,00	2017/08/15
3	Yorgurt	Chris	R15,00	96	R72,00	2017/08/16
4	Cream	Robert	R17,00	60	R51,00	2017/08/17
5	Cheese	Ndlovu	R13,50	35	R23,63	2017/08/18

CORRECT COLUMN INFO= √√√√√
Column headings adjusted=√√
Print = √√

TOTAL TABLE (10)

6.3

CORRECT INFORMATION ✓

C:\Users\Mugwena.mj\Documents\EXAMINATION NUMBER QUESTION.accdb Monday, 16 October 2017
Table: THE WILLOW TRADERS Page: 1

Columns

Name	Type	Size
ITEM NUMBER	Long Integer	4
PRODUCTION	Short Text	20
SALES MAN	Short Text	15
COST PRICE	Currency	8
NUMBER ORDERED	Integer	2
COMMISSION PAID	Currency	8
SALES DATE	Date With Time	8

CORRECT INFO IN COLUMN ✓

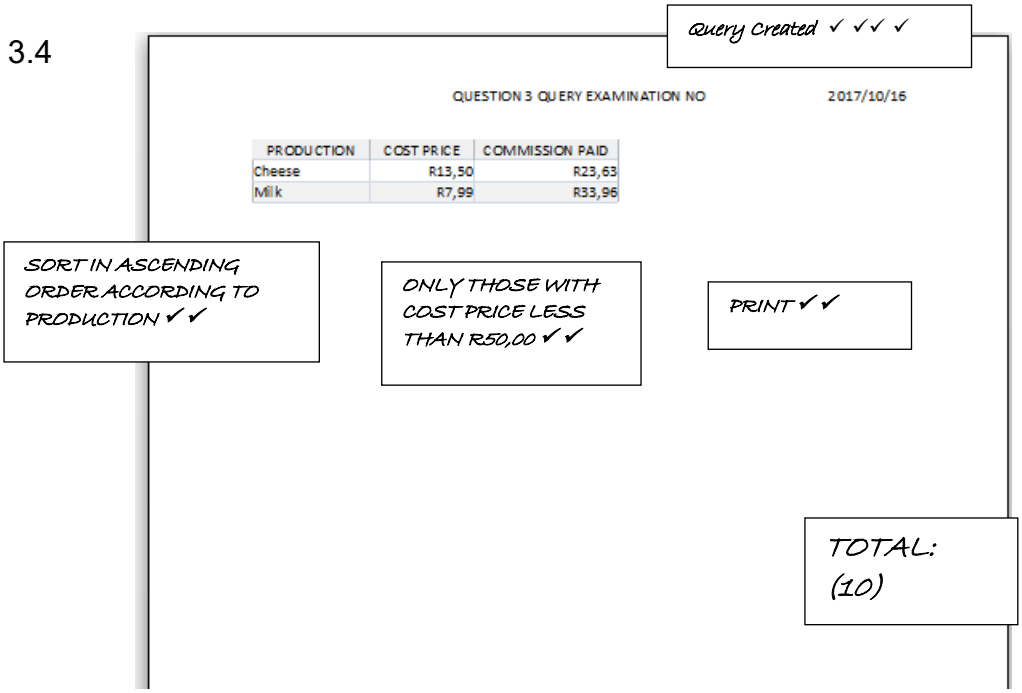
CORRECT INFO IN COLUMN ✓

CORRECT INFOR IN COLUMN ✓

PORTRAIT ✓

(5)

3.4



[25]

TOTAL SECTION B: 100
GRAND TOTAL: 200

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