Province of the
EASTERN CAPE
EDUCATION

Iphondo leMpuma Kapa: Isebe leMfundo
Provinsie van die Oos Kaap: Department van Onderwys
Porafensle Ya Kapa Botjhabela: Lefapha la Thuto

NATIONAL
SENIOR CERTIFICATE

GRADE 11

NOVEMBER 2025

MATHEMATICAL LITERACY P1

MARKS: 100

TIME: 2 hours

This question paper consists of 10 pages including 2 answer sheets.

INSTRUCTIONS AND INFORMATION

1.   Write your FULL NAME and SURNAME on the ANSWER BOOK.

2.   The question paper consists of FOUR QUESTIONS. Answer ALL the questions in the ANSWER BOOK.

3.   Start EACH question on a NEW page.

4.   Number the answers correctly according to the numbering system used in this question paper.

5.   Leave ONE line open between two sub-questions, for example between QUESTION 2.1 and QUESTION 2.2.

6.   Use the ANSWER SHEETS attached to answer QUESTIONS 2.2.2, 2.2.3 and 3.2.

7.   You may use a non-programmable calculator.

8.   You may use appropriate mathematical instruments.

9.   Show ALL formulae and substitutions in ALL calculations.

10.   Round off your final numerical answers to TWO decimal places, unless stated otherwise.

11.   Write neatly and legibly.

Please turn over

QUESTION 1

1.1 TABLE 1 presents the deposit slip details for funds to be credited to Cynthia Francis's account.

TABLE 1: CYNTHIA FRANCIS'S DEPOSIT SLIP

Deposit Slip				CFO BANK	
Credit Cynthia Francis				**15 December 2024**	
Teller's stamp	Paid by: Cynthia Francis			R	c
	Signature : C Francis		Notes	260	00
	Cell no: 061 320 4988		Coins	16	70
			Subtotal	276	70
Authorised by	Drawer's name	Bank	Branch		
Authority no.	1. A Troyd	BBC	Jamestown	340	00
	2. Z Pasi	DBE	Bloemfontein	480	80
			Total		
Account no.	2 4 5	7	1 6 4	8 3 4	

1.1.1 Write down Cynthia's account number. (2)

1.1.2 Determine how many transfers were from other banks. (2)

1.1.3 Write down the total amount of cash that she deposited. (2)

1.1.4 Calculate the total of the amount deposited. (2)

1.2 Zizo, a soccer fan, collected and analysed 2024/2025 goals scored for the Premium Soccer League. The goals scored for the league are indicated below.

TABLE 2: 2024/2025 PREMIER SOCCER LEAGUE GOALS SCORED

TEAMS	SFC	ORP	SUN	AMA	TSG	KAC	CHI	MGE	CTC
GOALS SCORED	73	60	46	35	35	32	31	30	27

Use the information above to answer the questions that follow.

1.2.1 Choose the correct word to make the statement TRUE.

The above data is numerical / categorical. (2)

1.2.2 Write down the highest number of goals scored in the league. (2)

1.2.3 List the teams that have the same number of goals scored. (2)

1.3   Choose a definition from COLUMN B that matches the term in COLUMN A. Write
       only the letter (A–F) next to the question numbers (1.3.1 to 1.3.4) in the ANSWER
       BOOK, for example 1.3.5 G.

	Column A		Column B
1.3.1	Questionnaire	A	the likelihood of something happening or not happening
1.3.2	Balance	B	a record of income and expenditure
1.3.3	Probability	C	instrument used to collect data
1.3.4	UIF	D	payment made into the bank account
		E	the difference between the debits and credits
		F	unemployment insurance fund

(4 x 2)   (8)

[22]

QUESTION 2

2.1 | Rowe has been driving a demo car for the past four years. Over these four years he managed to save 16% as a deposit of the price of the brand new car he wants to buy. He is interested in buying a 2025 Cherry Tiggo 7 Pro Max.

Rowe visited the dealer to purchase the car. The price of the car is R499 900,00.

NOTE: Focus will be on the price of the car only (no other initial costs). |

Use the above information to answer the following questions.

   2.1.1   Calculate the amount Rowe saved for the deposit. (2)

   2.1.2   Rowe secured a loan for the outstanding balance from the bank, agreeing to repay it over 36 months with a 9,5% annual simple interest rate.

          Calculate how much Rowe will pay if it takes him exactly 36 months to pay the loan. (5)

   2.1.3   Determine the monthly instalment Rowe will pay on the loan. (2)

   2.1.4   In the showroom there were different colours of the car Rowe wants to buy (2 red, 3 silver, 4 grey and 5 black). Calculate the probability, as a decimal, that Rowe will choose a silver car. (3)

2.2 | Waterfront High School wants to renovate their netball court. The school asked builders from the community to volunteer and assist with the renovations. The school estimated that it would take 3 builders 12 days to finish renovations, or it would take 12 builders 3 days to finish renovations. The table below displays this information.

TABLE 3: NUMBER OF BUILDERS AND DAYS TO RENOVATE THE NETBALL COURT

Number of builders	3	4	6	9	12
Number of days	12				3

Use the above information to answer the following questions.

   2.2.1   Derive a mathematical formula that represents the information given in the table. (2)

   2.2.2   Complete the table above by using the ANSWER SHEET for QUESTION 2.2.2 provided. (3)

   2.2.3   Use ANSWER SHEET QUESTION 2.2.3 provided to draw a graph to represent the data in TABLE 3. (4)

   2.2.4   Choose the correct word to make the statement false.

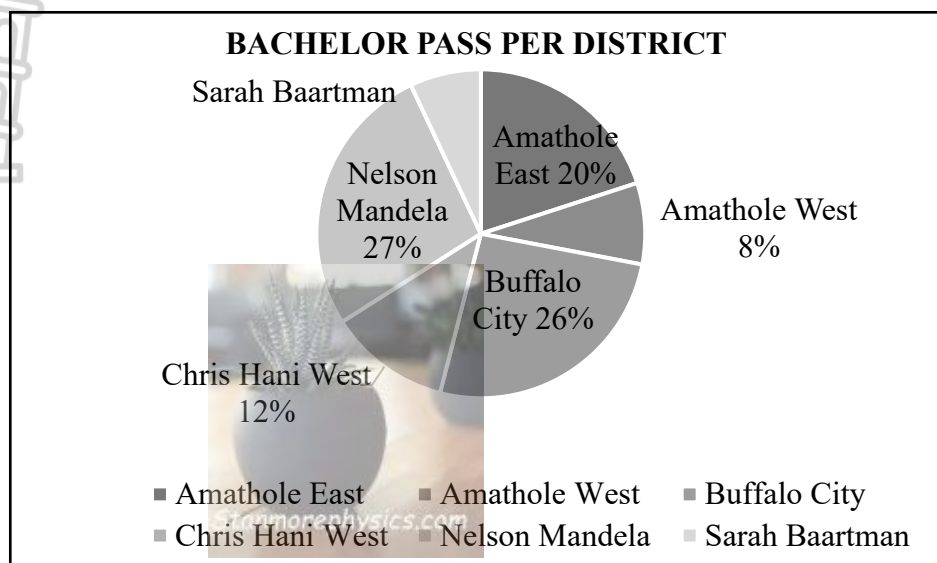   The relationship represented by the graph in QUESTION 2.2.3 is direct / indirect proportion. (2)

2.3   Joyce's salary is R20 600,00 per month. Last year her monthly salary was R20 000,00. Calculate the inflation rate. (4)

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QUESTION 3

3.1 The pie chart below shows the percentage of bachelor passes obtained by candidates in Cluster B Districts. The total number of bachelors passes in Cluster B Districts is 20 910.

BACHELOR PASS PER DISTRICT

- Amathole East
- Amathole West
- Buffalo City
- Chris Hani West
- Nelson Mandela
- Sarah Baartman

3.1.1 Determine the percentage of bachelor passes obtained by the Sarah Baartman District. (3)

3.1.2 Calculate the number of candidates with bachelor passes in Buffalo City. (3)

3.1.3 Determine the median percentage of bachelors passes. (3)

3.1.4 Write down the district that has the least percentage of bachelor passes. (2)

3.1.5 Calculate the mean percentage of bachelor passes in Cluster B. (3)

3.1.6 Determine the probability of randomly selecting a district with a bachelor pass of less than 10%. Write your answer as a simplified fraction. (3)

3.2 A clinic recorded the distribution of a few antibiotics to a sample group of learners at a school to see whether they contracted TB. The sample group was made up of nine classes. The results are shown in the table below.

TABLE 4: THE RESULTS OF LEARNERS WHO CONTRACTED TB

Classes	A	B	C	D	E	F	G	H	I
Number of antibiotics	35	30	10	50	45	35	20	55	10
Number of learners contracted TB	40	45	50	5	20	25	50	10	55

Draw a scatter plot to illustrate the data in the table above. Use the ANSWER SHEET provided for QUESTION 3.2. (6)

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QUESTION 4

4.1 | The invoice given below lists cleaning materials bought by Lily. Study the invoice and answer the questions that follow.

INCOME AND EXPENDITURE				
DESCRIPTION	**QUANTITY**	**LITRES**	**PRICE PER LITRE**	**COST**
1. Water-based general purpose cleaner	2	25	R99,00	R4 950
2. Pine fragrance disinfectant cleaner	2	25	R95,00	R4 750
			Sub Total	…
			VAT (15%)	R1 455
			Total Due	…

4.1.1 Calculate the total cost for ALL the material bought by Lily, including VAT. (4)

4.1.2 Lily states that the profit she makes from selling ONE 25 litre (25ℓ) Pine fragrance disinfectant cleaner is R450,00, if she sells a litre at R135,00.

Verify, showing ALL calculations, if her statement is VALID. (6)

4.1.3 The graph below shows the cost and selling price of all-purpose cleaner material per litre. Study the table and answer the questions that follow.
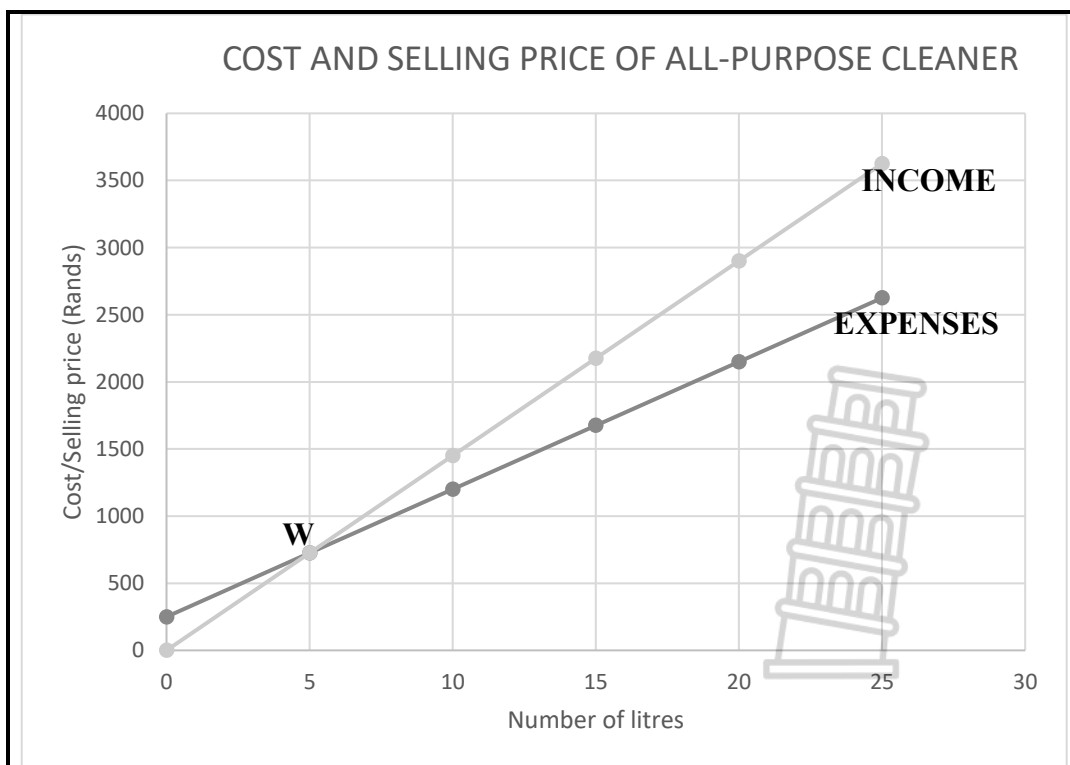
(a) Give the value(s) of the point marked (**W**) on the graph and explain the meaning of that point. (2)

(b) Write down the formula for Lily's expenses if she must pay rent of R200.
Cost = … + … (2)

4.2 | A South African company imports goods worth €45 000 from Europe.

The exchange rate is R1 = € 0,049669

Calculate the cost of the goods in South African Rand. (3)

4.3 | Below are the March Test results for nine Grade 11 Mathematical Literacy learners. The test was out of 75 marks.

| 15 | 60 | 75 | 67 | 68 | 73 | 60 | 75 | 58 |

The teacher claimed that the range of the class is 80%. Show by means of calculations whether the teacher's claim is VALID or not. (5)

4.4 | The City of FY2024/25 split the residential prepaid tariffs into Prepaid Low (indigent) and Prepaid High. Electricity tariffs for Prepaid Low are shown in TABLE 5.

TABLE 5: RESIDENTIAL PREPAID LOW INDIGENT (FY 2024/25)

	SIZE	TARIFF (kWh/R) (Excluding VAT)
Block 1	0 – 350 kWh	2,216
Block 2	>350 – 500 kWh	2,711
Block 3	> 500 kWh	3,226

Use TABLE 5 above to answer the question that follows.

Calculate how much a resident in this city pays a month, including VAT, when they use 374 kWh of electricity. (6)
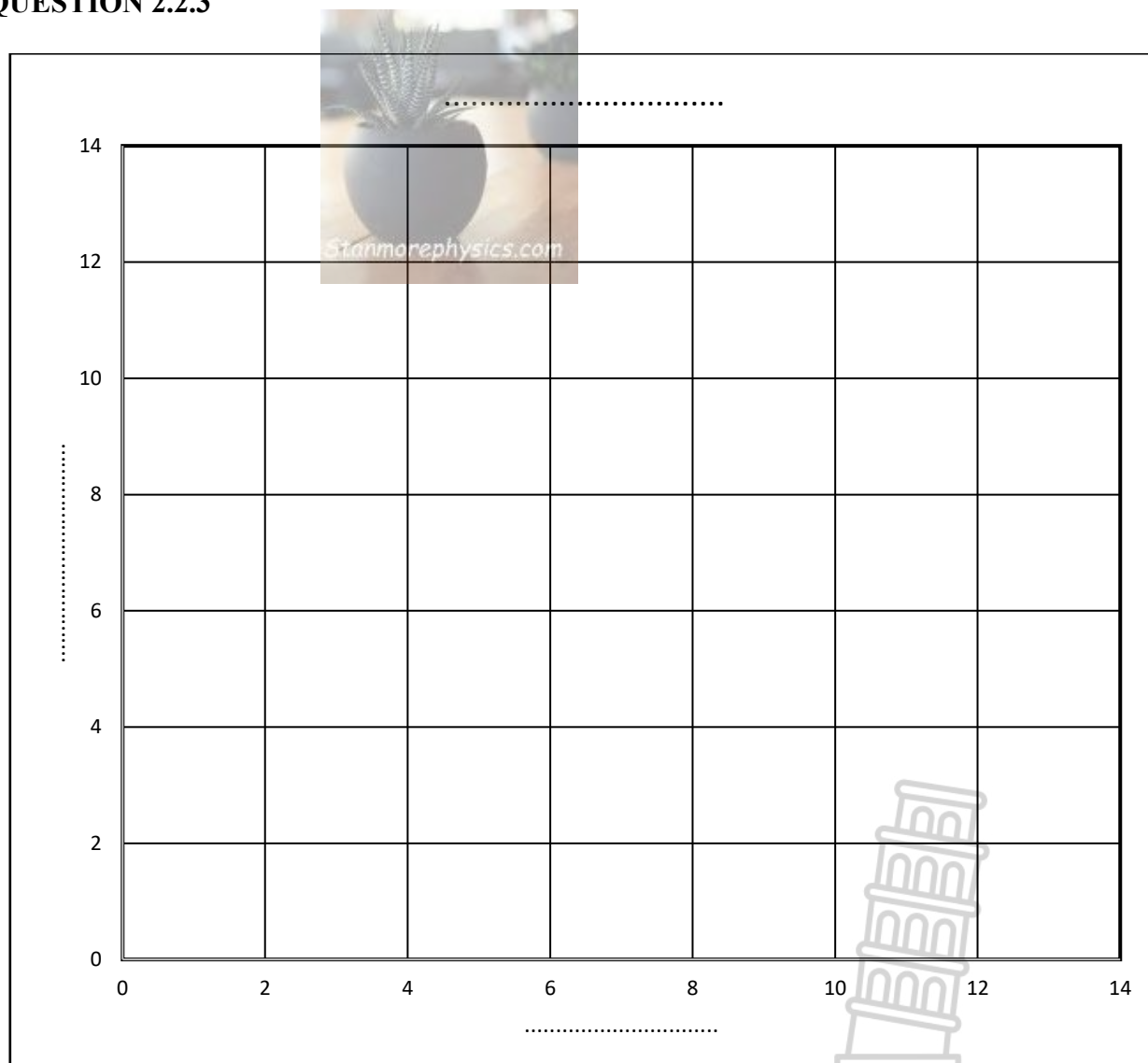
[28]

TOTAL: 100

ANSWER SHEET

NAME OF SCHOOL:…………………………………CLASS: ……………..

NAME OF LEARNER: ……………………………………

QUESTION 2.2.2

NO. OF BUILDERS	3	4	6	7	12
NO. OF DAYS	12				3

QUESTION 2.2.3

ANSWER SHEET

NAME OF SCHOOL:………………………………………… CLASS: ………………..

NAME OF LEARNER: ………………………………………………

QUESTION 3.2

CLASSES	A	B	C	D	E	F	G	H	I
Number of antibiotics	35	30	10	50	45	35	20	55	10
Number of learners contracted TB	40	45	50	5	20	25	50	10	55

SCATTER PLOT SHOWING ANTIBIOTICS AND NUMBER OF LEARNERS CONTRACTED TB

NUMBER OF LEARNERS CONTRACTED TB (y-axis: 5, 15, 25, 35, 45, 55)

NUMBER OF ANTIBIOTICS (x-axis: 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60)
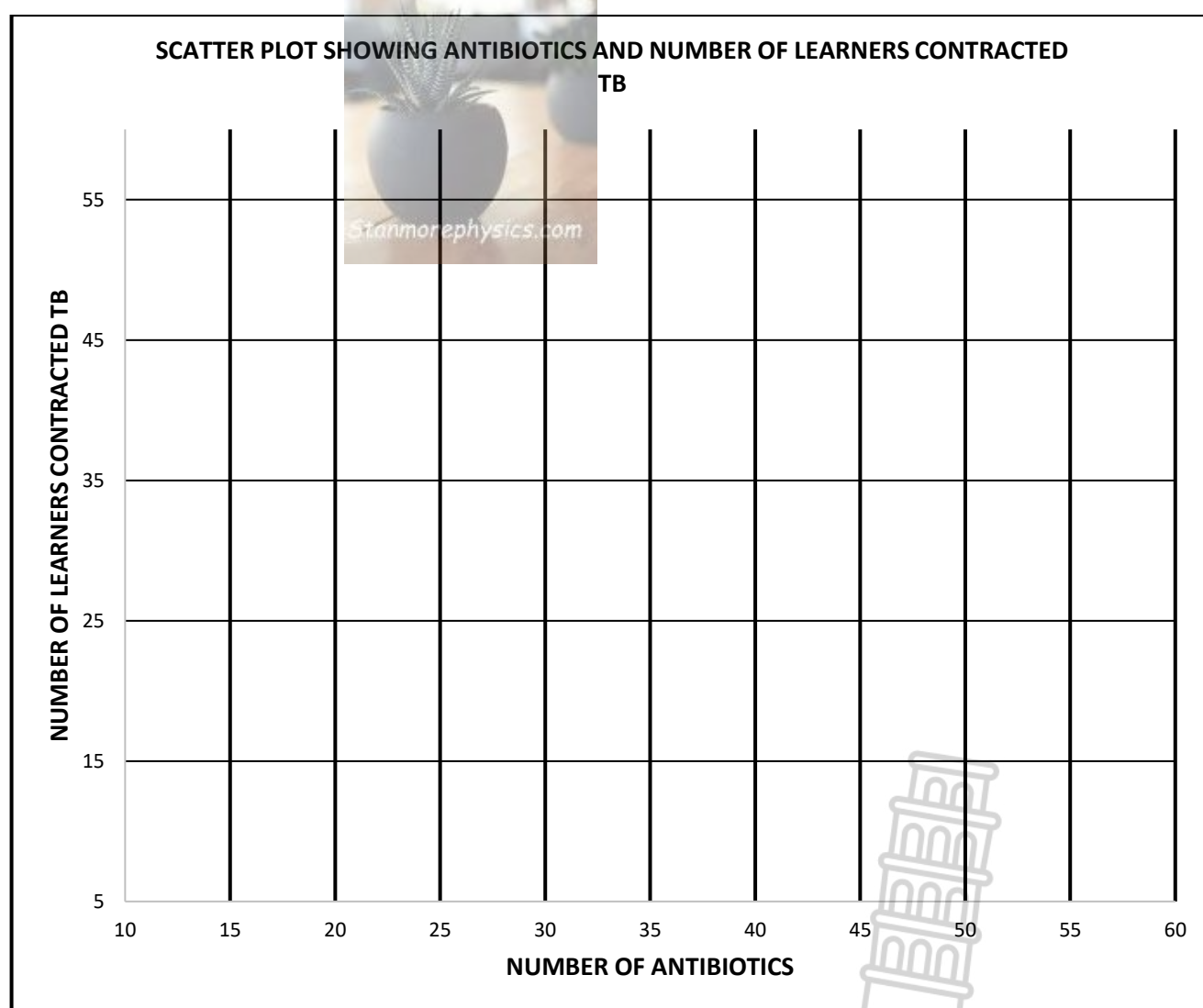
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GRADE 11

NOVEMBER 2025

| MATHEMATICAL LITERACY P1 |
| MARKING GUIDELINE |

MARKS: 100

This marking guideline consists of 8 pages.

Symbol	Explanation
M	Method
MA	Method with accuracy
CA	Consistent accuracy
A	Accuracy
C	Conversion
S	Simplification
RT	Reading from a table/a graph/document/diagram
SF	Correct substitution in a formula
O	Opinion/Explanation
P	Penalty, e.g. for no units, incorrect rounding off, etc.
R	Rounding off
NPR	No penalty for correct rounding minimum two decimal places
AO	Answer only
MCA	Method with constant accuracy

NOTE:
- If a candidate answers a question TWICE, only mark the FIRST attempt.
- If a candidate has crossed out an attempt of a question and not redone the question, mark the crossed out version.
- Consistent accuracy applies in ALL aspects of the marking guideline. Stop marking at the second calculation error.
- NOTE: Consistent accuracy (CA) does NOT apply in cases of a breakdown.
- If the candidate presents any extra solution when reading from a graph and table, then penalise for every extra item presented.
- As a general marking principle, if a candidate has incurred one mistake and there is evidence of sound Mathematics thereafter, then that candidate should lose ONE mark only.
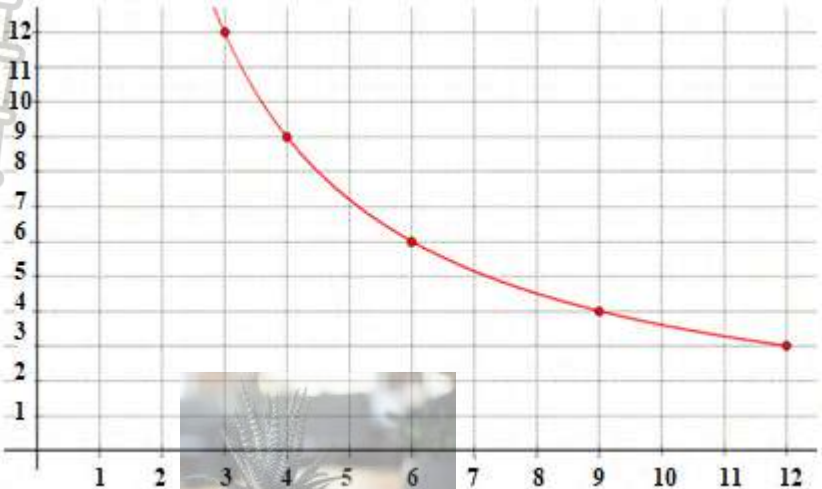
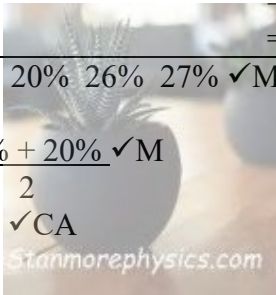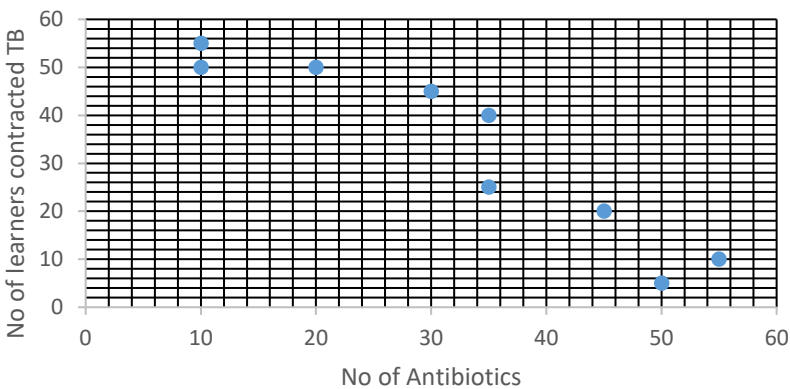**Topics: F – Finance, DH – Data Handling, P – Probability**

QUESTION 1 [22 Marks]

No.		Solution	Explanation	Topic and Level
1.1	1.1.1	2 457 164 834 ✓✓A	2A correct answer (2)	F L1
	1.1.2	2 Cheques/Two cheques ✓✓A	2A correct number of cheques (2)	F L1
	1.1.3	Amount of cash = R276,70 ✓✓A	2A correct amount (2)	F L1
	1.1.4	Total Amount = R260,00 + R16,70 + R340,00 + R480,00 ✓MA = R1 097,50 ✓A **AO – FULL MARKS**	1MA Adding correct amounts 1A correct answer (2)	F L1
1.2	1.2.1	Numerical ✓✓A	2A correct answer (2)	D L1
	1.2.2	73 ✓✓A	2A correct points (2)	D L1
	1.2.3	TSA and AMA ✓✓A	2A correct teams (2)	D L1
1.3	1.3.1	C ✓✓ A	2A correct definition (2)	D L1
	1.3.2	E ✓✓A	2A correct definition (2)	F L1
	1.3.3	A ✓✓A	2A correct definition (2)	P L1
	1.3.4	F ✓✓A	2A correct definition (2)	F L1
			[22]	

No.		Solution	Explanation	Topic and Level
2.1	2.1.1	Deposit saved $= \frac{16}{100} \times R499\ 900,00$ ✓MA $= R79\ 984,00$ ✓A	1MA multiplying correct amount by 16% 1A correct answer (2)	F L2
	2.1.2	Balance = R499 900,00 – R79 984,00 ✓MA $= R419\ 916,00$ ✓A Repayment $= R419\ 916,00 + \left(\frac{9,5}{100} \times \right.$ $\left. R419\ 916,00 \right) \times 3$ ✓MA $\quad\quad = R419\ 916,00 + (R39\ 892,02 \times 3)$ $\quad\quad = R419\ 916,00 + R119\ 676,06$ ✓MA $\quad\quad = R539\ 592,06$ ✓CA **Loan amount can also be calculated as:** $\frac{84}{100} \times R499\ 900 = R419\ 916,00$	**CA from 2.1.1** 1MA subtracting correct deposit 1A correct balance 1MA multiplying by 9,5% and 3 1MA adding correct balance 1CA answer (5)	F L4
	2.1.3	Monthly instalment $= \frac{539\ 592,06}{36}$ ✓ $\quad\quad = R14\ 988,67$ ✓	**CA from 2.1.2** 1M division by 36 1A answer rounded to 2 DP (2)	F L2
	2.1.4	P(Silver Car) $= \frac{3✓A}{14✓A} = 0,21$ ✓R	1A numerator 1A denominator 1R rounding (3)	P L2
2.2	2.2.1	Number of builders x number of days = 36 ✓✓A **OR** Number of Builders $= \frac{36}{number\ of\ days}$ ✓✓A	2A correct formula (2)	F L2
	2.2.2	<table><tr><td>No. of builders</td><td>3</td><td>4</td><td>6</td><td>9</td><td>12</td></tr><tr><td>No. of days</td><td>12</td><td>**9** ✓</td><td>**6** ✓</td><td>**4** ✓</td><td>3</td></tr></table>	1A 9 days 1A 6 days 1A 4 days (3)	F L2

	2.2.3	Number of builders vs No. of days	✓✓✓ All points plotted ✓ joining the points with a smooth curve (4)	
	2.2.4	Direct Proportion ✓✓A	2A direct (2)	F L1
2.3		Inflation rate = $\dfrac{\text{Price Difference}}{\text{Original Amount}} \times 100$ ✓M $= \dfrac{R20\ 600 - R20\ 000}{R20\ 000} \times 100$ ✓M ✓M $= 3\%$ ✓CA	1M subtracting correct values 1M multiplying by 100 1M division by R20 000 1CA answer (4)	F L2
			[27]	

No.		Solution	Explanation	Topic and Level
3.1	3.1.1	% = 100 – (12 + 26 + 8 + 20 + 27 + 7) ✓M = 100 – 93 ✓M = 7% ✓CA	1M adding correct values 1M subtracting 1CA % (3)	D L1
	3.1.2	Number of learners in Buffalo City $= \frac{26}{100} \times 20\,910$ ✓M = 5 436,6 ✓S = 5 437 learners ✓R	1M correct value 1S simplification 1R whole number (3)	D L2
	3.1.3	7% 8% 12% 20% 26% 27% ✓M **CA from 3.1.1** Median = $\frac{12\% + 20\%}{2}$ ✓M = 16% ✓CA	1M arranging in order 1M concept of median 1CA answer in percentages (3)	D L3
	3.1.4	Sarah Baartman ✓✓RT **CA from 3.1.1**	2RT correct district (2)	D L2
	3.1.5	Mean $= \frac{7+8+12+20+26+27}{6}$ ✓M ✓M = 16,67% ✓CA **CA from 3.1.1**	1M adding correct values 1M concept of a mean 1CA correct mean (3)	D L2
	3.1.6	P(District less than 10%) $= \frac{2}{6}$ ✓A✓A $= \frac{1}{3}$ ✓CA	1A numerator 1A denominator 1CA simplified fraction (3)	D L2
3.2			3A 1 mark for every 3 points plotted correctly 1A for title 2A for x- and y-axis (6)	D L4
			[23]	

Please turn over

QUESTION 4 [28 Marks]

No.		Solutions	Explanations	Topic and Level
4.1	4.1.1	Cost = R4 950 + R4 750 ✓M = R9 700 ✓A = R9 700 + R1 455 ✓M = R11 155 ✓CA	1M adding correct amounts 1A answer 1M adding VAT amount 1CA answer (4)	F L3
	4.1.2	Profit = Income – Expenses = R135 – R95 ✓RT ✓M = R40 ✓A = R40 × 25 ✓M = R1 000 ✓CA INVALID ✓O **OR** Cost = 25 x 95 = R2 375 Income = 135 x 25 = 3 375 Profit = 3 375 – 2 375 = 1 000 INVALID ✓O	1RT correct values 1M subtracting correct values 1M multiplying by 25 1CA answer 1O conclusion **OR** 1RT correct values 1M subtracting correct values 1M multiplying by 25 1CA answer 1O conclusion (6)	F L4
	4.1.3	(a) Values = W(5;675) ✓A The income is equal to expenses ✓A	1A correct points 1A correct meaning (2)	FL1
		(b) Cost = R200,00 + R95,00 x number of liters ✓✓MA	2MA correct formula (2)	F L2
4.2		R1 = € 0,049669 ? = € 45 000 $\frac{€45\,000}{€0,049669} \times R1$ ✓RT ✓M = R905 997,70 ✓CA	1RT correct amount 1M dividing by the correct rate 1CA simplification (3)	F L4
4.3		Range of marks = 75 – 15 ✓RT ✓MA = 60 ✓CA Range as a %: $\frac{60}{75} \times 100 = 80\%$ ✓M VALID ✓O	1MA concept of range 1RT correct values 1CA range of the data 1M multiply by 100 1O opinion (5)	D L3

4.4	✓MA ✓M	1MA correct kWh	F
	Block 1 = 350 kWh x R2,216 = R775,60	1M cost of 350 kWh	L4
	Block 2 = 24 kWh x R2,711 = <u>R65,064</u> ✓M	1M cost for 24 kWh	
	= R840,664 x 1,15 ✓MA	1MA multiplying by 1,15	
	= R966,7636 ✓CA	1CA answer	
	= R966,76 ✓R	1R rounding	
		(6)	
		[28]	
		TOTAL:	**100**	