



**LIMPOPO**

**PROVINCIAL GOVERNMENT**  
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF  
**EDUCATION**

**NATIONAL SENIOR  
CERTIFICATE**

**GRADE 12**

**PROVINCIAL MIDYEAR EXAMINATION  
MATHEMATICAL LITERACY P1  
MAY/JUNE 2026**

**MARKS: 100**

**TIME: 2 hours**

*Stanmorephysics.com*

**This question paper consists of 12 pages.**

## INSTRUCTIONS AND INFORMATION

1. This question paper consists of FOUR questions. Answer ALL the questions.
2. Read ALL the questions carefully.
3. Use ANNEXURE A, on page 8 in the Answer book, to answer QUESTION 4.2.
4. You may use an approved calculator (non-programmable and non-graphical), unless stated otherwise.
5. Show ALL calculations clearly.
6. Round off ALL final answers appropriately according to the given context, unless stated otherwise.
7. Indicate units of measurement, where applicable.
8. Maps and diagrams are NOT necessarily drawn to scale, unless stated otherwise.
9. For the purposes of answering this question paper, a VAT rate of 15% must be used where necessary.
10. Write neatly and legibly.



## QUESTION 1

- 1.1. Karabo works for National Department of Water and Sanitation in Pretoria as an Engineer. She receives her monthly salary at the end of every month. Her salary slip for April 2026 is given below.

National Department of Water and Sanitation			
Salary Slip			
<b>Employee Name : Mukhari Karabo</b>			
<b>Designation : Water Engineer</b>			
<b>Department : Water and Sanitation</b>			
<b>Notch : 674 400</b>			
<b>Persal No. : 125006788</b>			
<b>Month : 30 April 2026</b>			
Earnings		Deductions	
Salary head	Amount	Salary head	Amount
Basic	R 56 200	Tax RSA	R 14 622
Housing Allowance	R 1 950	GEPE	R 4 215
Medical Allowance	R 3 300	GEMS	R 3 313
Transport Allowance	R 4 450	Housing bond	R 12 500
		Sanlam insurance	R 750
<b>SALARY (GROSS)</b>	<b>R 65 900</b>		<b>A</b>
<b>SALARY (NET)</b>	<b>R 30 500</b>		

**[Adapted from dept. of water & sanitation]**

Use Salary Slip given above to answer the questions that follow.

- 1.1.1 Write down the acronym “**GEPE**” in full. (2)
- 1.1.2 Define “**Net Salary**” as per given context (2)
- 1.1.3 Determine, the missing value A, Karabo’s total deductions. (2)

1.1.4 Express as a **unit ratio**, correct to **THREE** decimal places, Karabo’s transport allowance to her net salary. (3)

1.1.5 Express Karabo’ tax as a percentage, correct to a whole number, of her basic salary. (3)

1.2 Nelson is researching about the African Countries with the most educated people in 2023 and 2024

**TABLE 1: AFRICAN COUNTRIES WITH THE MOST EDUCATED PEOPLE IN 2023 AND 2024**

COUNTRY	LITERACY % IN 2023	LITERACY % IN 2024	POPULATION IN 2024
Botswana	87.0	88.5	2 351 627
Burundi	87.0	85.6	11 890 784
Cape Verde	85.0	87.6	555 987
Equatorial Guinea	95.0	95.3	1 402 983
Gabon	82.0	83.2	2 225 734
Libya	90.0	91.0	6 871 292
Mauritius	89.0	90.6	1 271 768
Seychelles	94.0	91.8	98 347
South Africa	93.0	94.3	59 308 690
Zimbabwe	84.0	86.5	14 862 924

[Adapted from [www.africanexponent.com](http://www.africanexponent.com)]

Use TABLE 1 above to answer the question that follow.

1.2.1 Identify the country with the least literacy percentage rate in 2024. (2)

1.2.2 Write down the data collection method that can be used to collect the data above. (2)

1.2.3 Arrange, in descending order, Literacy % in 2023. (2)

1.2.4 Determine the probability of visiting the African Country with a Literacy % less than 82% in 2023. (2)

[20]

**QUESTION 2**

2.1

Omphile Mufeba would like to buy two laptops for her twin daughters. Each laptop cost R9 589,95 (including VAT). She does not have the full cash amount needed to buy the laptops. She is considering taking out a personal loan.

She obtained the following personal loan payment table shown in TABLE 2 on the interest.

**TABLE 2: Personal loan payment table**

Loan amount	Monthly payment for different periods		
	12 months	36 months	48 months
R2 000	R185,75	R74,84	R0,00
R4 000	R371,50	R149,68	R0,00
R10 000	R928,74	R374,19	R306,97
R20 000	R1 857,48	R748,38	R613,95
R30 000	R2 786,22	R1 122,57	R920,92

Note: Monthly service fee: R69,00

Monthly balance-protection insurance fee: R45,00

A once-off initiation fee: R535,00

[comoney.co.za]

Use TABLE 2 and the information above to answer the question that follow.

2.1.1 Omphile decides to take a personal loan of R20 000 repayable over a period of 4 years.

(a) Calculate the total monthly amount she will pay for the loan, excluding initiation fee. (2)

(b) Calculate the total interest she will pay for this loan, excluding the monthly service fee and monthly balance protection insurance fee. (4)

2.1.2 Omphile stated that if she had invested R17 000 at a bank for 2 years with compound interest, at an 5,7% per annum in the first year and 6,9% per annum in the second year, she would have the full amount needed to buy the two laptops. Verify, showing ALL calculation, whether her statement is correct or not. (6)

2.2

Ronald Thobejane and his family (his wife and 3 children aged 17, 14 and 12) lives in Hampshire, England. They plan is to visit the Kruger National Park in South Africa, during the Easter holidays.

**TABLE 3: The Thobejane Family’s holiday cost as of February 2022.**

ITEM	COST	
1. Flight tickets	R 85 825,00	
2. Accommodation: 3 bedroom chalet	R1 950,00 per night including taxes and charges	
3. Meals at the Lodge		
● Breakfast	R90,00 per person per day	
● Lunch	R120,00 per person per day	
● Supper	R150,00 per person per day	
4. Entertainment	R2 500,00	
5. Daily Conservation fees	Prices per adult per day	Prices per child per day
● Foreign Visitors	\$27 USD	\$14 USD

Check-in date and time at the lodge: 14 April 2022 @ 6:00 pm

Check out date and time at the lodge: 19 April 2022 @ 10:00 am

NOTE:

- Conservation fees are also charged on the day visitors leave the park.
- Viewing time starts at 07:00 and ends at 17:30.
- Chalet is a small cabin, cottage or house that is used by holiday makers

**EXCHANGE RATE AS 26 FEBRUARY 2022**

● £ 1 = R 20, 303941	● R 1 = £ 0,049251523
● \$ 1 = £ 0.7456698	● £ 1 = \$ 1,3410762

[legacyhotels.co.za and www.xe.com]

Use the information above to answer the question that follow.

- 2.2.1 Show that the total amount the family will spend on accommodation is R9 750. (2)
- 2.2.2 Calculate the total amount spent on meals, in Rand, if the family arrived at the lodge in time for supper on the first and left soon after breakfast on the last day. (5)
- 2.2.3 Mr. Thobejane stated that the total cost of the holiday will be more than R100 000. (9)  
Verify by showing all the calculation whether his statement is valid.

[28]

**QUESTION 3**

3.1

TABLE 4 below shows the number of people per province working in TWO workplaces, namely Usual Workplace (UWP) and Work From Home (WFH) for the last quarter of 2020 and the first quarter of 2021.

**TABLE 4: PEOPLE PER WORKPLACE BY PROVINCE**

PROVINCES	LAST QUARTER 2020 (IN TEN THOUSAND)			FIRST QUARTER 2021 (IN TEN THOUSAND)		
	UWP	WFH	TOTAL	UWP	WFH	TOTAL
Western Cape	147,7	21,7	169,3	150,8	18,4	169,2
Eastern Cape	72,3	7,2	79,6	84,9	5,6	90,5
Northern Cape	24,2	0,5	24,7	23	0,5	23,5
Free State	56,9	3,2	60,1	53,4	2,9	56,3
KwaZulu - Natal	199,9	9,4	209,3	193,1	9,5	202,6
North West	46,4	2,4	48,8	51,3	3,1	54,4
Gauteng	342,4	36,6	379	365,9	33,1	399,0
Mpumalanga	93,8	5,8	99,6	98	5,7	103,7
Limpopo	91,4	6,3	97,7	95,6	4,7	100,3
TOTAL	1 075	---	1 168,1	1 116	83,5	1 199,5

[Adapted from www.statssa.gov.za]

Use TABLE 4 above to answer the questions that follow.

- 3.1.1 Show how the total value of 83,5 for South Africa was calculated. (2)
- 3.1.2 Give ONE reason why the values in the table will differ from the actual workplace values. (2)
- 3.1.3 Write down the number of people who worked at their usual workplaces (UWP) in Gauteng during the first quarter of 2021. (2)
- 3.1.4 Give ONE example of a job that cannot be done by working from home. (2)
- 3.1.5 Calculate the mean number of people in the WFH category for South Africa in the last quarter of 2020. (3)

3.2

Mbhoni has a son Thabiso, who is in grade 12. She wanted to check how many distinctions were obtained from 2020 to 2022 in the Eastern Cape. The information is shown in TABLE 5 below.

**TABLE 5: NUMBER OF DISTINCTIONS PER DISTRICT IN THE EASTERN CAPE FROM 2020 TO 2022.**

DISTRICT	NUMBER OF DISTINCTIONS		
	2020	2021	2022
Alfred Nzo East	655	1055	1270
Alfred Nzo West	1254	1615	1953
Chris Hani East	972	1462	1943
Chris Hani West	768	1188	1114
Joe Gqabi	551	795	886
OR Tambo Coastal	1775	2783	2883
OR Tambo Inland	2439	4100	4404
Amathole East	1872	2390	2382
Amathole West	444	622	817
Buffalo City	2700	3615	3508
Sara Baartman	<b>M</b>	887	736
Nelson Mandela Metro	2878	3662	3198

[Adapted from www.education.gov.za]

Use TABLE 5 above to answer the questions that follow

- 3.2.1 Identify the District that obtained the highest number of distinction in two consecutive years. (2)
- 3.2.2 Determine missing value **M**, if the mean number of distinctions obtained in 2020 is 1425. (6)
- 3.2.3 Calculate (to the nearest whole number) the total number of candidates who wrote the examination in Alfred Nzo West in 2022 if the percentage distinction is 3,01073%. (4)

[23]

**QUESTION 4**

4.1

Mr. Langa aged 50, earned an annual taxable income of R 495 602 for the year ending 29 February 2022. He does not contribute to any medical aid

Use the above information to answer the questions that follow.

4.1.1 The following formula can be used to calculate annual tax payable before the rebate:

$$\begin{aligned} &\text{Annual Tax Payable before the rebate} \\ &= R115\,762 + [36\% \times (\text{annual taxable income} - R\,488\,700)] \end{aligned}$$

Use this formula to calculate Mr Langa's annual tax payable before the rebate. (3)

4.1.2

Mr Langa feels that the monthly tax table is an easier option for him to calculate his monthly tax payable.

TABLE 6 below shows the monthly deductions for three income categories for the year ending 28 February 2022.

**TABLE 6: MONTHLY DEDUCTION TAX TABLE FOR THREE INCOME CATEGORIES FOR THE YEAR ENDING 28 FEBRUARY 2022**

Monthly income	Tax payable per age group		
	Under 65	65 - 74	Over 75
R41 241 - R41 291	R8 473	R7 723	R7 473
R41 292 - R41 342	R8 491	R7 741	R7 491
R41 343 - R41 393	R8 510	R7 760	R7 510

Use the information above and Table 6 to answer the questions that follow:

- (a) The monthly rebate for a person younger than 65 years old is R1 368,75. Verify, showing ALL calculations, whether his monthly tax will be correct according to the monthly deduction tax table. (7)
- (b) Calculate the total tax payable by a 66 years old employee with a monthly income of R 41 350 for six months. (3)

4.2

The pie charts on ANNEXURE B compare the five best-selling vehicles in South Africa, America and Canada for 2021.

Use ANNEXURE B to answer the questions that follow.

4.2.1 Write down, in words, the total number of vehicles sold in America. (2)

4.2.2 Express as a ratio in the form sold in America, Canada and South Africa respectively.:\_\_\_\_:\_\_\_\_:\_\_\_\_, the number of Toyota RAV4s (2)

4.2.3 Write down the median number of the best-selling vehicles in South Africa. (2)

4.2.4 Determine the number of Ford F-series vehicles sold in Canada. (3)

4.2.5 The interquartile range for the top 10 vehicles sold in South Africa is 7 669 and the value of Quartile 1 is 11 408.  
Calculate the value of Quartile 3. (4)

4.2.6 Determine, as a percentage, the probability of purchasing a Ram Pickup in America (3)

**[29]**

**[TOTAL MARKS: 100]**








**FOLLOW THESE INSTRUCTIONS CAREFULLY.**

1. Clearly write your examination number and centre number in the space provided and attach your barcode label in the space provided.
2. Remember that your own name (or the name of your school) may not appear anywhere on or in this answer book.
3. Answer ALL questions in the spaces provided.
4. No pages may be torn from this answer book.
5. Read the instructions printed on your timetable carefully as well as any other instructions which may be given in each examination paper.
6. Candidates may not retain an answer book or remove it from the examination room.
7. Answers must be written in black/blue ink as distinctly as possible.
8. Do not write in the margins.
9. If you require additional space for your answers:
  - 9.1 Use the additional space provided at the end of the answer book.
  - 9.2 When answering a question in the additional space, indicate clearly the question number in the column on the left-hand side.
10. Draw a neat line through any work that must not be marked...

**QUESTION/VRAAG 1**

Q/V	Solution/Oplissing	Marks/Punte
1.1.1		
		(2)
1.1.2		
		(2)
1.2.3		
		(2)
1.1.4		
		(3)
1.1.5		
		(3)
1.2.1		(2)
1.2.2		(2)
1.2.3		
		(2)
1.2.4		(2)
		[20]

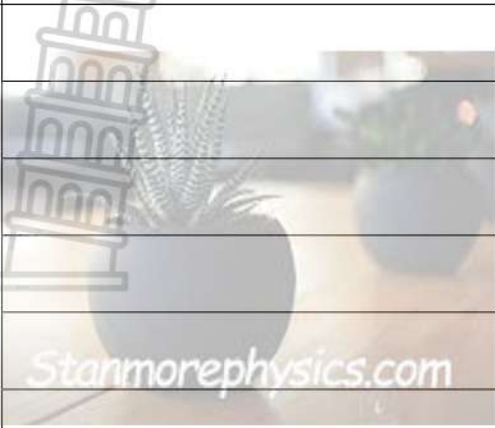

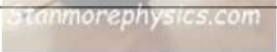
**QUESTION/VRAAG 2**

Q/V	Solution/Ooplossing	Marks/Punte
2.1.1 (a)		(2)
2.1.1 (b)		(4)
2.1.2		(6)
2.2.1		(2)
2.2.2		

		(5)
2.2.3		
		[28]

**QUESTION/VRAAG 3**

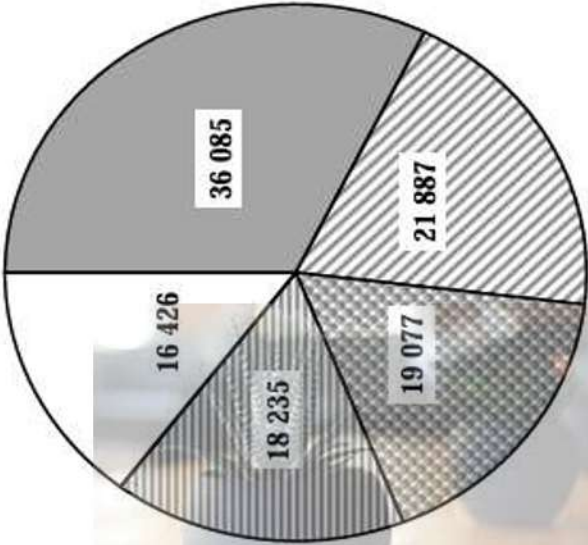
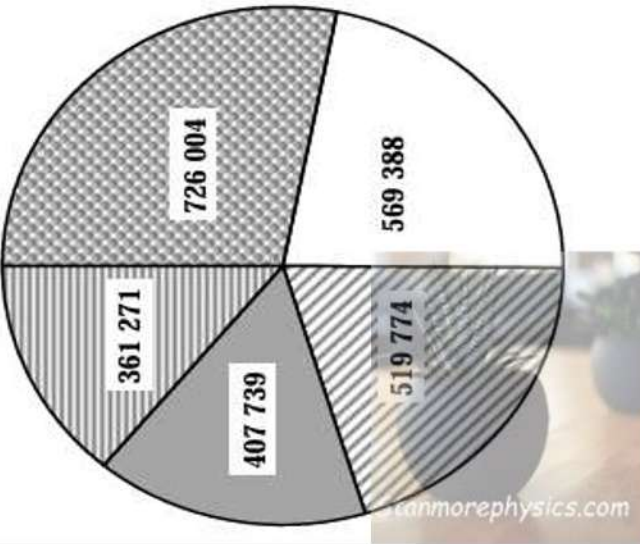
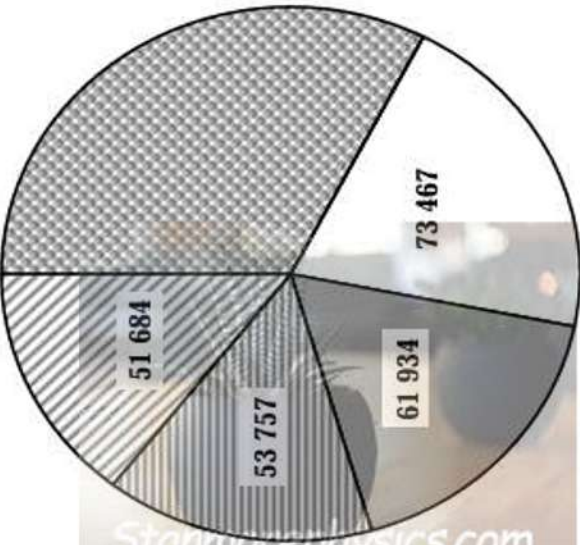
Q/V	Solution/Oplissing	Marks/Punte
3.1.1		
		(2)
3.1.2		
		(2)
3.1.3		
		(2)
3.1.4		
		(2)

Q/V	Solution/Oplissing	Marks/Punte
3.1.5		(4)
3.2.1		
3.2.2		(6)
3.2.3		
		(24)

ANNEXURE B

QUESTION 4.2

COMPARISON OF THE FIVE BEST-SELLING VEHICLES IN SOUTH AFRICA, AMERICA AND CANADA FOR 2021


SOUTH AFRICA	AMERICA	CANADA
 <p> <input type="checkbox"/> Toyota RAV4    <input type="checkbox"/> VW Polo Vivo  <input type="checkbox"/> Ford Ranger    <input type="checkbox"/> VW Polo  <input type="checkbox"/> Isuzu D-Max                 </p>	 <p> <input type="checkbox"/> Ford F-series    <input type="checkbox"/> Ram Pickup  <input type="checkbox"/> Chev Silverado    <input type="checkbox"/> Toyota RAV4  <input type="checkbox"/> Honda CR-V                 </p>	 <p> <input type="checkbox"/> Ford F-series    <input type="checkbox"/> Ram Pickup  <input type="checkbox"/> Toyota RAV4    <input type="checkbox"/> GMC Sierra  <input type="checkbox"/> Chev Silverado                 </p>
<p>TOTAL NUMBER OF VEHICLES SOLD = 111 710</p>	<p>TOTAL NUMBER OF VEHICLES SOLD = 2 584 176</p>	<p>TOTAL NUMBER OF VEHICLES SOLD = 357 243</p>

[Adapted from [www.driving.ca](http://www.driving.ca), [www.forbes.com](http://www.forbes.com) and [www.businesslive.co.za](http://www.businesslive.co.za)]

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**QUESTION/VRAAG 4**

Q/V	Solution/Oplissing	Marks/Punte
4.1.1		(3)
4.1.2 (a)		
4.1.2 (b)		(2)
4.2.1		(2)

4.2.2		(2)
4.2.3		(2)
4.2.4		(3)
4.2.5		(4)
4.2.6		(3)
		(28)
<b>TOTAL MARKS</b>		<b>[100]</b>









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DEPARTMENT OF  
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**NATIONAL SENIOR CERTIFICATE**

**GRADE 12**

**MATHEMATICAL LITERACY PAPER 1**

**MARKING GUIDELINES**

**MAY/JUNE 2026**

**MARKS : 100**

Symbol	Explanation
M	Method
MA	Method with accuracy
CA	Consistent accuracy
A	Accuracy
C	Conversion
S	Simplification
RT	Reading from a table/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 rounding
AO	Answer only
MCA	Method with consistent accuracy
RCA	Rounding consistent with accuracy

**This marking guidelines consist of 10 pages**

**NOTE:**

- If a candidate answers a question TWICE, only mark the FIRST attempt.
- If a candidate has crossed out (cancelled) an attempt to a question and NOT redone the solution, mark the crossed out (cancelled) version.
- Consistent accuracy (CA) applies in ALL aspects of the marking guidelines; however it stops at the second calculation error.
- If the candidate presents any extra solution when reading from a graph, table, layout plan and map, then penalise for every extra item presented.
- Rounding is an independent mark.
- General principle of marking, if the candidate makes one mistake he loses one mark.
- A conclusion mark can only be given if relevant calculations precedes it



QUESTION 1 [20 MARKS ANSWER ONLY FULL MARKS]			
Q/V	Solution	Explanation	T&L
1.1.1	Government Employees Pension Fund ✓✓A	2A correct acronym in full (2)	F L1 E
1.1.2	Net salary is the final amount of money that Karabo received in her bank account after all deductions were made at the end of the month ✓✓A	2A correct definition (2)	F L1 E
1.1.3	<p>Deductions(A) = Gross Salary – Net Salary = R 65 900 – R 30 500 ✓MA = R 35 400 ✓A</p> <p><b>OR</b></p> <p>Deductions(A) = R 14 622 + R 4 215 + R3 313 + R12 500 + R 750 ✓MA = R 35 400 ✓A</p>	<p>1MA subtracting correct values 1A correct answer</p> <p><b>OR</b></p> <p>1MA adding correct values 1A correct answer</p> <p>(2)</p>	F L1 E
1.1.4	$\begin{aligned} \text{Transport allowance : Net salary} &= 4\,450 : 30\,500 \\ &= 1 : 6,854 \quad \checkmark A \end{aligned}$	<p>2RT 4 450 and 30 500 1A simplification</p> <p>(3)</p>	F L1 E
1.1.5	$\begin{aligned} \text{Karabo's tax as a percentage} &= \frac{R\,14\,612}{R\,56\,200} \times 100\% \quad \checkmark MA \\ &= 26,01779359\% \\ &\approx 26\% \quad \checkmark R \end{aligned}$	<p>1RT both numerator &amp; denominator 1MA percentage concept</p> <p>1R correct answer</p> <p>(3)</p>	F L1 M
1.2.1	Burundu ✓✓A	2A correct country (2)	D L1 E
1.2.2	<p>Survey ✓✓A</p> <p>OR</p> <p>Questionnaires</p> <p>OR</p> <p>Quizzes</p> <p>OR</p> <p>Google form</p>	2A correct method (2)	D L1 E
1.2.3	$95,0 ; 94,0 ; 93,0 ; 90,0 ; 89,0 ; 87,0 ; 87,0 ; 85,0 ; 84,0 ; 82,0$	<p>1RT all correct values 1MA correct order</p> <p>(2)</p>	D L1 E
1.2.4	<p>Zero ✓✓A</p> <p>OR</p> <p>0%</p> <p>OR</p> <p>Impossible</p>	2A correct probability (2)	P L1 E
		<b>[20]</b>	

QUESTION 2 [28 MARKS]			
Q/V	Solution	Explanation	T&L
2.1.1 (a)	Total monthly amount $= R\ 613,95 + R69,00 + R45,00 \checkmark MA$ $= R727,95 \checkmark CA$	1MA adding correct values 1CA simplification AO (2)	F L1
(b)	Total amount paid $= R613,95 \times 48\ \text{months} \checkmark MA$ $= R29\ 469,60 \checkmark CA$ Total interest paid $= R29\ 469,60 - R20\ 000,00 \checkmark MCA$ $= R9\ 469,60 \checkmark CA$	1MA multiply correct values 1CA Simplification 1MCA subtracting correct values 1 CA correct answer (4)	F L2
2.1.2	Interest for year 1 $= R17\ 000,00 \times 5,7\% \checkmark MA$ $= R969,00 \checkmark CA$ Amount at the end of year 1 $= R17\ 000,00 + R969,00$ $= R17\ 969,00 \checkmark CA$ Interest for year 2 $= R17\ 969,00 \times 6,9\% \checkmark MCA$ $= R1\ 239,86$ Amount at the end of year 2 $= R17\ 969,00 + R1\ 239,86$ $= R19\ 208,86 \checkmark CA$ Her statement is correct. $\checkmark O$ OR Amount at the end of the year 2: $\checkmark M \quad \checkmark MA \quad \checkmark MA$ $= R17\ 000,00 \times 105,7\% \times 106,9\% \checkmark M$ $= R19\ 208,86 \checkmark CA$ Her statement is correct $\checkmark O$	1MA calculating % 1CA simplification  1CA simplification 1MCA calculating %  1CA simplification 1O conclusion OR 1M calculating % 1MA 1 <sup>st</sup> year adding % 1MA 2 <sup>nd</sup> year adding % 1M compound calculation 1CA simplification 1O conclusion (6)	F L4
2.2.			
2.2.1	$\checkmark RT \quad \checkmark MA$ Accommodation $= R1\ 950,00 \times 5\ \text{nights}$ $= R9\ 750,00$	1RT R 1 950 1MA multiply by 5 AO (2)	F L1
2.2.2	Amount spent on breakfast $= R90,00 \times 5 \times 5\ \text{days} \checkmark MA$ $= R2\ 250,00$ Amount spent on lunch $= R120,00 \times 5 \times 4\ \text{days} \checkmark M$ $= R2\ 400,00$ Amount spent on supper $= R150,00 \times 5 \times 5\ \text{days} \checkmark M$ $= R3\ 750,00$ Total amount spent on meal: $= R2\ 250,00 + R2\ 400,00 + R3\ 750,00 \checkmark MCA$ $= R8\ 400,00 \checkmark CA$ OR Total amount spent on meals: $\checkmark MA \quad \checkmark MA \quad \checkmark MA$ $= (R90,00 \times 5 \times 5) + (R120,00 \times 5 \times 4) + (R150,00 \times 5 \times 5)$ $= R2\ 250,00 + R2\ 400,00 + R3\ 750,00 \checkmark MCA$ $= R8\ 400,00 \checkmark CA$	1MA multiply correct values  1MA multiply by 4 days  1MA multiply correct values  1MCA adding correct values 1CA simplification OR 3MA multiply correct values 1MCA adding correct values 1CA simplification (5)	F L3



3.1.3	Number of people $\checkmark$ RT $= 365,9 \times 10\ 000$ $= 3\ 659\ 000$ <b>OR/OF</b> 365,9 ten thousand $\checkmark$ A	1RT reading from table  1A correct value  (2)	D L1 E
3.1.4	Medical sector e.g. doctor/ nurse Security sector e.g. police / security guards Essential services e.g. cashier Construction sector e.g. plumbing / electrician / builder Agricultural sector e.g. farming $\checkmark\checkmark$ A	2A correct job  (2)	D L1 E
3.1.5	$\text{Mean} = \frac{21,7 + 7,2 + 0,5 + 3,2 + 9,4 + 2,4 + 36,6 + 5,8 + 6,3}{9} \checkmark$ RT  $= \frac{93,1}{9} \checkmark$ MA OR $\frac{1\ 186,1 - 1\ 075}{9} = \frac{93,1}{9}$  $= 10,3444444444$ $= 10,3444444444 \times 10\ 000$ $= 103\ 444,4444$ $\approx 103\ 444$ OR 103 445 $\checkmark$ CA Mean in ten thousand	1RT adding correct values  1MA concept of mean  1CA correct mean <b>NPR</b>  (3)	D L2 M
3.2.1	OR Tambo Inland $\checkmark\checkmark$ RT	2RT correct district  (2)	D L1 E
3.2.2	$\checkmark$ RT $1425 = (655 + 1254 + 972 + 768 + 551 + 1775 + 2439 + 1872 + 444 + 2700 + M + 2878) \div 12 \checkmark$ MA  $1\ 425 = \frac{16\ 308 + M}{12} \checkmark$ SF $16\ 308 + M = 17\ 100 \checkmark$ MA $M = 17\ 100 - 16\ 308 \checkmark$ $M = 792 \checkmark$ CA	1RT correct values  1MA dividing by 12  1SF substitution  1MA simplification dig 1M correct method 1CA correct answer  (6)	F L3 M
3.2.3	Total number of candidates $= \frac{1953}{3,01073\%} \checkmark$ RT $\checkmark$ MA $= 64\ 867,98883 \checkmark$ CA $= 64\ 868 \checkmark$ R	1RT correct value 1MA concept of % decrease 1CA Simplification 1R correct rounding  (4)	F L2 M
<b>[23]</b>			

<b>QUESTION 4 [28 MARKS]</b>			
<b>Q/V</b>	<b>Solution</b>	<b>Explanation</b>	<b>T&amp;L</b>
4.1.1	<p>Tax Payable (before rebates)</p> $= R115\,762 + [36\% \times (\text{annual taxable income} - R\,488\,700)]$ <p style="text-align: right;">✓SF</p> $= R\,115\,762 + \left[\frac{36}{100} \times (R\,495\,602 - R\,488\,700)\right]$ $= R115\,762 + R\,2\,484,72 \quad \checkmark \text{ MA}$ $= R118\,246,72 \quad \checkmark \text{ CA}$	<p><b>AO</b></p> <p>1SF substituting value</p> <p>1MA adding values</p> <p>1CA simplification</p> <p style="text-align: right;">(3)</p>	F L2 E
4.1.2 (a)	<p>Monthly tax (before rebate)</p> $= R118\,246,72 \div 12 \quad \checkmark \text{ MA}$ $= R9\,853,89 \quad \checkmark \text{ CA}$ <p>After rebate</p> <p style="text-align: right;">✓MA</p> $= R9\,853,89 - R1\,368,75$ $= R8\,485,14 \quad \checkmark \text{ MCA}$ <p>Monthly taxable income</p> $= R495\,602 \div 12$ $= R41\,300,17 \quad \checkmark \text{ A}$ <p>Tax payable (according to table)</p> $= R8\,491 \quad \checkmark \text{ RT}$ <p>He is incorrect ✓O</p> <p><b>OR/OF</b></p> <p>Annual rebate</p> $= R1\,368,75 \times 12 \quad \checkmark \text{ MA}$ $= R16\,425 \quad \checkmark \text{ A}$ <p>Annual tax (after rebate)</p> $= R118\,246,72 - R16\,425$ $= R101\,821,72 \quad \checkmark \text{ A}$ <p>Monthly income</p> $= R495\,602 \div 12 \quad \checkmark$ $= R41\,300,17 \quad \checkmark \text{ A}$ <p>Annual tax</p> $= R8\,491 \times 12$ $= R101\,892 \quad \checkmark \text{ MCA}$ <p>He is incorrect. ✓O</p>	<p><b>CA from Question 4.1.1</b></p> <p>1MA dividing by 12</p> <p>1CA monthly tax</p> <p>1MA subtracting rebate</p> <p>1MCA finding tax after rebate</p> <p>1A monthly income</p> <p>1RT correct tax payable</p> <p>1O conclusion</p> <p><b>OR/OF</b></p> <p>1MA multiplying by 12</p> <p>1A correct annual rebate</p> <p>1A annual tax</p> <p>1MA dividing annual income by 12</p> <p>1A monthly income</p> <p>1MCA annual tax</p> <p>1O conclusion</p>	F L4 D

	<p><b>OR/OF</b></p> <p>Monthly tax before rebate</p> <p>= R118 246,72 ÷ 12 ✓MA</p> <p>= R9 853,89 ✓A</p> <p>Monthly taxable income</p> <p>= R495 602 ÷ 12 ✓</p> <p>= R41 300,17 ✓A</p> <p>Before rebate</p> <p>= R8 491 + R1 368,75 ✓MA</p> <p>= R9 859,75 ✓MCA</p> <p>He is incorrect . ✓O</p>	<p><b>OR/OF</b></p> <p>1MA dividing by 12</p> <p>1A correct answer</p> <p>1MA dividing annual income by 12</p> <p>1A correct answer</p> <p>1MA adding rebate</p> <p>1MCA finding tax after rebate</p> <p>1O conclusion</p> <p>(7)</p>	
4.1.2 (b)	<p>Tax payable for six months</p> <p>✓RT</p> <p>= R 7 760 × 6 ✓MA</p> <p>= R 46 560 ✓CA</p>	<p>1RT R 7 7650</p> <p>1MA multiplying by 6</p> <p>1CA simplification</p> <p>(3)</p>	F L2 M
4.2.1	<p>Two million five hundred and eighty four thousand one hundred and seventy six. ✓✓A</p>	<p>2A correct words</p> <p>(2)</p>	D L1 E
4.2.2	<p>✓RT</p> <p>407 739 : 61 934 : 36 085 ✓MA</p>	<p>1RT correct values</p> <p>1MA correct order</p> <p>(2)</p>	F L2 M
4.2.3	<p>16 426; 18 235; <b>19 077</b>; 21 887; 36 085 ✓A</p> <p>Median = 19 077 ✓A</p>	<p><b>AO</b></p> <p>1A arranging values</p> <p>1A correct median</p> <p>(2)</p>	D L2 E
4.2.4	<p>Number of Ford F-Series</p> <p>✓MA ✓RT</p> <p>= 357 243 – (53 757 + 51 684 + 73 467 + 61 934)</p> <p>= 357 243 – 240 842</p> <p>= 116 401 ✓CA</p>	<p><b>AO</b></p> <p>1RT correct values from graph</p> <p>1MA subtracting from total</p> <p>1CA simplification</p> <p>(3)</p>	D L2 E

4.2.5	Interquartile range ✓A $IQR = Q3 - Q1$ ✓SF $7\ 669 = Q3 - 11\ 408$ ✓MA $Q3 = 7\ 669 + 11\ 408$ $= 19\ 077$ ✓CA	<b>AO</b>  1A correct formula 1SF substituting into formula 1MA changing the subject of the formula 1CA simplification  (4)	D L3 M
4.2.6	Probability ✓RT $\frac{569\ 388}{2\ 584\ 176} \times 100\%$ ✓RT $= 22,03363858\%$ $\approx 22,03\%$ ✓CA	1RT correct numerator 1RT correct denominator  1CA simplification <b>NPR</b>  (3)	P L2 M
		<b>[29]</b>	
<b>TOTAL MARKS [100]</b>			

