LIMPOPO

PROVINCIAL GOVERNMENT

REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF

EDUCATION

CAPRICORN SOUTH DISTRICT

MATHEMATICAL LITERACY

GRADE 12

INVESTIGATION

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MARKS: 73

This question paper consists of 06 pages including the cover page.

INSTRUCTIONS AND INFORMATION

1. This question paper consists of THREE questions. Answer ALL the questions.
2. Number the questions correctly according to the numbering system used in this question paper.
3. Start EACH question on a NEW page.
4. You may use an approved calculator (non-programmable and non-graphical), unless stated otherwise.
5. Show ALL calculations clearly.
6. Round ALL the final answers appropriately according to the context, unless stated otherwise.
7. Indicate units of measurement, where applicable.
8. Maps and diagrams are NOT necessary drawn to scale, unless stated otherwise.
9. Write neatly and legibly.

QUESTION 1

Look at the advertisement of a house for sale below.



Ermelo, Mpumalanga
A good house for first time buyer. Close to town and schools. Has 3 bedrooms, 2 bathrooms and double garage.

Property price: R1 060 000

Loan conditions when financed by ABC Bank.
Deposit: 10%
Loan period: 25 years
Interest rate: Prime + 1,5%

Factor Table

	Interest Rates			
	9,5%	10%	10,5%	11%
5 years	21	21,25	21,49	21,74
15 years	10,44	10,75	11,05	11,37
20 years	9,32	9,65	9,98	10,32
25 years	8,74	9,09	9,44	9,8

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Use the information above to answer the questions that follow.

1.1 Define the following term "Prime interest" according to the given context: (2)

1.2 Calculate the loan value when buying this house. (4)

1.3 If the prime interest is 9,5%, use the factor table above to determine the monthly repayments. (6)

1.4 Calculate the total amount of interest that would be paid when the loan is written off. (5)

[17]

QUESTION 2

This is an extract from the information that was provided to Ms Marita Snyman, the taxpayer who earned a monthly salary in 2023/24. The information explains how to work out how much tax he had to pay on her income. Note that there are seven different 'tax brackets' where different tax rates are applied.

TABLE 2: INCOME TAX RATES FOR THE 2023/2024 TAX YEAR.

Taxable Income(R)	**Rates of tax (R)**
1 - 237 000	18% of taxable income
237 001 – 370 500	42 678 + 26% of taxable income above 237 000
370 501 – 512 800	77 362 + 31% of taxable income above 370 500
512 801 – 673 000	121 475 + 36% of taxable income above 512 800
673 001 – 857 900	179 147 + 39% of taxable income above 673 000
857 901 – 1 817 000	251 258 + 41% of taxable income above 857 900
1 817 001 and above	644 489 + 45% of taxable income above 1 817 000

Age category	**REBATES**	Threshold	
Primary	17 235	95 750	
Secondary (65 and older)	9 444	148 217	
Tertiary (75 and older)	3 145	165 689	

[source: www.SARS.gov.za]

Use the information above to answer the questions that follow.

2.1 Explain the difference between Monthly Salary and Annual Salary. (4)

2.2 Write down two Non-Taxable incomes for the Personal Income Tax. (4)

2.3 Write down the formula on how to calculate the Taxable Income. (2)

2.4 Show how the amount of R179 147 in Column 5 of Rates of tax (R) **and** the amount of R165 689 from the Threshold were calculated. (7)

2.5 Calculate the monthly tax for Ms Marita Snyman (67 years), who earns a taxable income of R0,915 000 million, would have to pay. (9)

2.6 Give One reason and show calculations, why a domestic worker, who is earning R25,42 per hour for eight hours per day, five days a week, is not legible to pay tax. (4)

[30]

QUESTION 3

The City of Mbombela implemented water restrictions through the introduction of drought relief tariffs and penalties because the levels of the dams feeding the Mbombela supply areas are low and these tariffs will be effective until further notice.

TABLE A: WATER TARIFFS FOR THE CITY OF MBOMBELA.

DOMESTIC (VAT incl.)	
	2022/2023
Up to and including 6 kl	Free
Over 6 kl up to and including 12 kl	R25,24
Over 12 kl up to and including 40 kl	R34,82
Over 40 kl	R39,22

DOMESTIC (VAT incl.)	
	2023/2024
Up to and including 6 kl	Free
Over 6 kl up to and including 12 kl	R26,75
Over 12 kl up to and including 30 kl	R38,76
Over 30 kl up to and including 40 kl	R40,60
Over 40 kl up to and including 150 kl	R54,05
Over 150 kl	R56,12

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Use information above to answer the questions that follow.

3.1 Define the term "Tariff" according to the given context. (2)

3.2 Municipality has issued out penalties to curb excessive use of water during the Drought period. List four measures that can assist consumers to use water sparingly. (4)

3.3 Calculate the percentage increase (to one decimal place) for Block 4 in 2023/2024. (4)

3.4 Mr Jones has bought water for R1 000. Calculate the number of units bought with that amount in 2023/2024. (6)

3.5 Give ONE reason why the Municipality use the block system for Water and Electricity tariffs. (2)

3.6 Calculate the VAT amount for Block 3 in 2022/2023. (3)

3.7 Thabo lives in a Two-Bedroomed house with his wife and buys 40 kl of water every month in 2023/2024. Do you think it is advisable for Thabo to buy that amount of water in a month? (Show all the calculations.) (5)

[26]

GRAND TOTAL: 73