KWAZULU-NATAL PROVINCE
EDUCATION
REPUBLIC OF SOUTH AFRICA

NATIONAL SENIOR CERTIFICATE



MARKS: 100

TIME: 2 hours

This question paper consists of 11 pages, and an Addendum with 1 Annexure.

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INSTRUCTIONS AND INFORMATION

1. This question paper consists of FOUR questions. Answer ALL the questions.
2. Use the ANNEXURE in the ADDENDUM to answer the following question:

   ANNEXURE A for QUESTION 2.1.
3. Number the answers correctly according to the numbering system used in this question paper.
4. Start EACH question on a NEW page.
5. You may use an approved calculator (non-programmable and non-graphical), unless stated otherwise.
6. Show ALL calculations clearly.
7. Round off ALL final answers appropriately according to the given context, unless stated otherwise.
8. Indicate units of measurement, where applicable.
9. Diagrams are NOT drawn to scale, unless stated otherwise
10. Write neatly and legibly.

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QUESTION 1

1.1 TABLE 1 below shows a Statement of Financial Performance for Umlalazi Local Municipality for the month that ended on the 31 March 2024.

TABLE 1: STATEMENT OF FINANCIAL PERFORMANCE

REVENUE	**MARCH 2024 R'000**
Service Charges	80 566
Rental from facilities and equipment	965
Interest earned	14 103
Fines	1 350
Licences and permits	1 719
Government grants and subsidies	254 053
Other income	4 801
TOTAL REVENUE	**357 557**
EXPENDITURE	**MARCH 2024 R'000**
Employee related costs	133 258
Remuneration of councillors	**A**
Depreciation	37 395
General expenses	48 341
Transfers and grants	5 175
Bulk purchases	59 353
TOTAL EXPENDITURE	**302 644**
SURPLUS/DEFICIT	**54 913**

[Adapted from www.umlalazi.gov.za]

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Use the information above to answer the questions that follow.

1.1.1 Identify the major source of revenue for the municipality. (2)

1.1.2 Write down the revenue amount from 'Licences and permits' in words. (2)

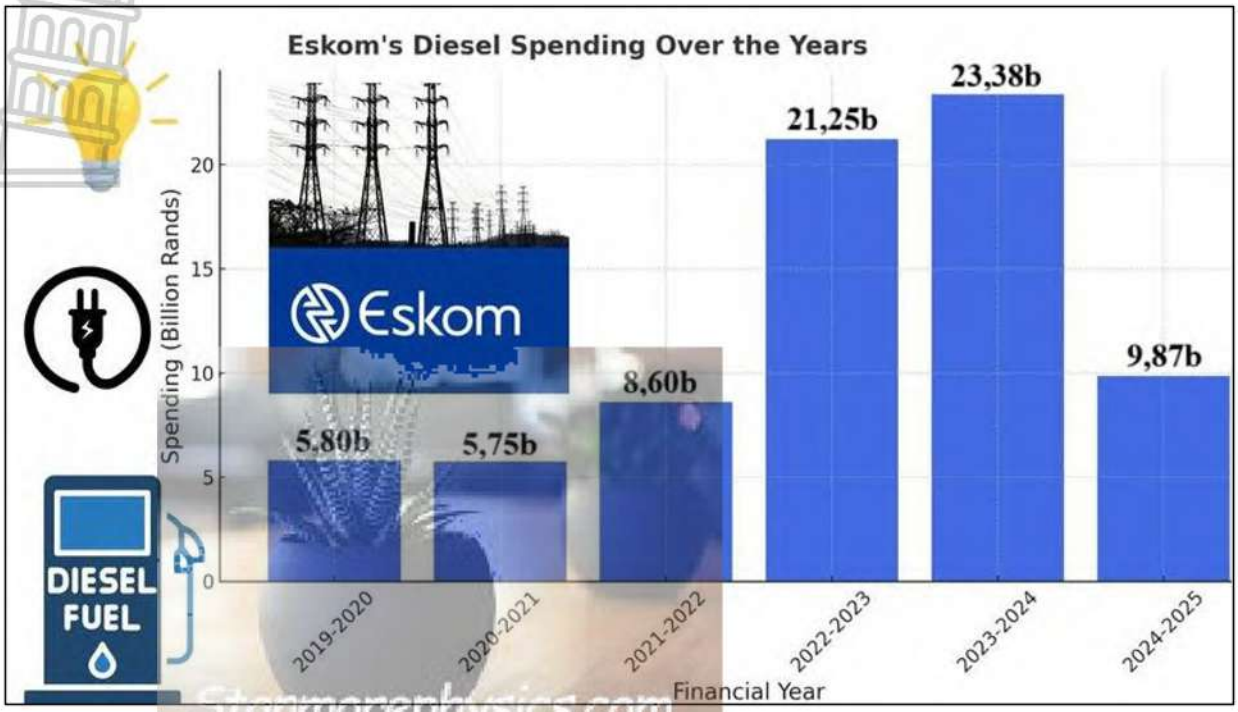
1.1.3 Determine, in simplest form, the ratio of Depreciation to Transfers and grants. (2)

1.1.4 Calculate the value of **A**, remuneration of councillors. (2)

1.1.5 Give one example of employee related cost. (2)

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1.2 Keeping lights on has come at a cost for South Africa. The graph below shows the amount spent on diesel from 2019 to 2025.



[Adapted from www.iol.co.za]

N.B: b = billion

Use the graph and information above to answer the questions that follow.

1.2.1 Name the type of graph above. (2)

1.2.2 State whether the data in graph above is discrete or continuous. (2)

1.2.3 Arrange the amounts spent on diesel in descending order. (2)

1.2.4 Identify the financial year and the corresponding amount in which Eskom's diesel expenditure ranked as the third lowest. (2)

1.2.5 Calculate the difference between the highest amount and the lowest amount spent on diesel from 2019 to 2025. (2)

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QUESTION 2

2.1

Joseph took a loan of R50 000 from FF Finance Institution in January 2024 to be paid back over a period of 24 months. The bank charged an interest rate of 18,5% per annum compounded monthly for the first 18 months and 18% per annum compounded monthly for the remaining period.

The decrease in the interest rate was a result of the Reserve Bank decreasing the repo rate by 25 basis points (0,25%). Joseph requested the bank not to decrease the monthly payment.

ANNEXURE A shows how the monthly interest and balance changed over the 24 months period.

N.B: FF FINANCE CHARGES COMPOUND INTEREST ONLY ON LOANS

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Use the information above and the ANNEXURE to answer the questions that follow.

2.1.1 Define the term *loan amount* according to the given context. (2)

2.1.2 Show how the interest amount of R770,83 was calculated. (2)

2.1.3 Calculate **B**, the balance at the end of the nineteenth month. (3)

2.1.4 State one reason why Joseph's last payment is not the same as the other payments. (2)

2.1.5 Calculate the real cost of the loan. (2)

2.1.6 Use your answer in 2.1.5 to determine the total interest on the loan. (2)

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2.2

Joburg City Power uses the following electricity tariff rates to charge its customers for electricity consumption. **N.B: Service Charge and Capacity Charge include 15% VAT.**

TABLE 2: RESIDENTIAL PREPAID HIGH TARIFF RATES (VAT Excl.)

BLOCK	CONSUMPTION	TARIFF RATE EXCLUDING 15% VAT (c/kWh)
1.	0 - 350	236,34
2.	351 - 500	271,10
3.	> 500	308,91
Service Charge		**R 70,00**
Capacity Charge		**R130,00**

[Adapted from www.joburb.go.za]

NOTE:

- **Total Fixed Charge = Service Charge + Capacity Charge**
- **Service charge and Capacity charge includes 15% VAT**

Use TABLE 2 above to answer the questions that follow.

2.2.1 Calculate the Total Fixed Charge. (2)

2.2.2 Magwaza family used 640 kWh of electricity. Calculate the amount (including **VAT** and **Total Fixed Charge**), paid by Mr Magwaza. (9)

Use TABLE 2 above to answer the questions that follow.

2.2.1 Calculate the total fixed charge. (2)

2.2.3 A Joburg City Power employee calculated a charge of R756.29 (excluding VAT and the Total fixed charge) for consuming 320 kWh. The employee informed Mr. Magwaza that if the household had used 320 kWh, the cost would be half of R2116.26, which is the charge for 640 kWh.

2.2.2 Magwaza family used 640 kWh of electricity. Calculate the amount, excluding VAT, charged the household. **N.B: Leave out the service and capacity charges** (6)

Use calculations to verify the employee's claim. (6)

2.2.3 Hence, determine the amount, including VAT and total fixed charge, paid by the household. (4)

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2.2.4 (5)

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QUESTION 3

3.1

The results of the NSC exam for 2024 is shown in the TABLE 3 below.

TABLE 3: NATIONAL PERFORMANCE IN THE 2024 NSC EXAMINATIONS

National Performance in the 2024 NSC Examinations.

Provinces	2024		
	Total Wrote	Total Achieved	% Achieved
Eastern Cape	99 739	84 760	**A**
Free State	36 312	33 039	90.99
Gauteng	133 228	117 793	88.41
KwaZulu-Natal	161 962	144 990	89.52
Limpopo	93 474	79 461	85.01
Mpumalanga	64 201	54 567	84.99
North West	40 575	35 513	87.52
Northern Cape	12 937	10 892	84.19
Western Cape	62 863	54 414	86.56
National	**705 291**	**615 429**	**87.26**

[Source:www.dbe.gov.za]

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Use the information in TABLE 3 above to answer the questions that follow.

3.1.1 Name the stage of the data handling cycle represented in Table 5. (2)

3.1.2 Calculate the missing value **A**. (4)

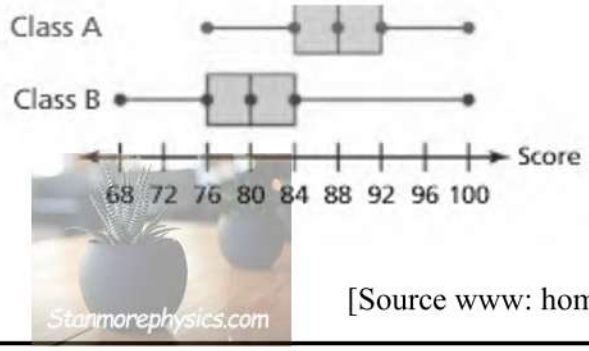
3.1.3 Determine the province with the median number of learners who achieved in the 2024 NSC examination. (3)

3.1.4 A claim was made that an average of 10 000 learners per province failed. Verify this claim, showing ALL calculations (5)

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3.2

The box and whisker plots below illustrates the percentage test scores of learners from two classes.



[Source www: homeworkstudy.com]

Use the information above to answer the following questions.

3.2.1 Quartile 1 for Class A was 84%. Explain what this means for this class. (2)

3.2.2 Calculate the inter quartile range for Class B

You may use the formula:

IQR = Q3 – Q1 (3)

3.2.3 State ONE disadvantage of the Interquartile range. (2)

3.2.4 Determine which class performed better, using the five-number summary to support your answer. (5)

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QUESTION 4

4.1

Lwazi is a 22-year-old student. He is in an internship programme with an Accounting Company. He earns a taxable income of R7 979 per month. He does not belong to a medical aid. TABLE 4 and TABLE 5 show the Income tax rate and Rebate table for the year 2024/2025.

TABLE 4: INCOME TAX RATE TAX YEAR (1 MAR 2024 – 28 FEB 2025)

Taxable income (R)	Rates of tax (R)
1 – 237 100	18% of taxable income
237 101 – 370 500	42 678 + 26% of taxable income above 237 100
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

TABLE 5: TAX REBATES

Tax Rebate			Tax Year
	2025	**2024**	**2023**
Primary	R17 235	R17 235	R16 425
Secondary (65 and older)	R9 444	R9 444	R9 000
Tertiary (75 and older)	R3 145	R3 145	R2 997

Use the information in the tables above to answer the questions that follow.

4.1.1 Define the term *Tax Threshold*. (2)

4.1.2 Determine Lwazi's annual taxable income. (2)

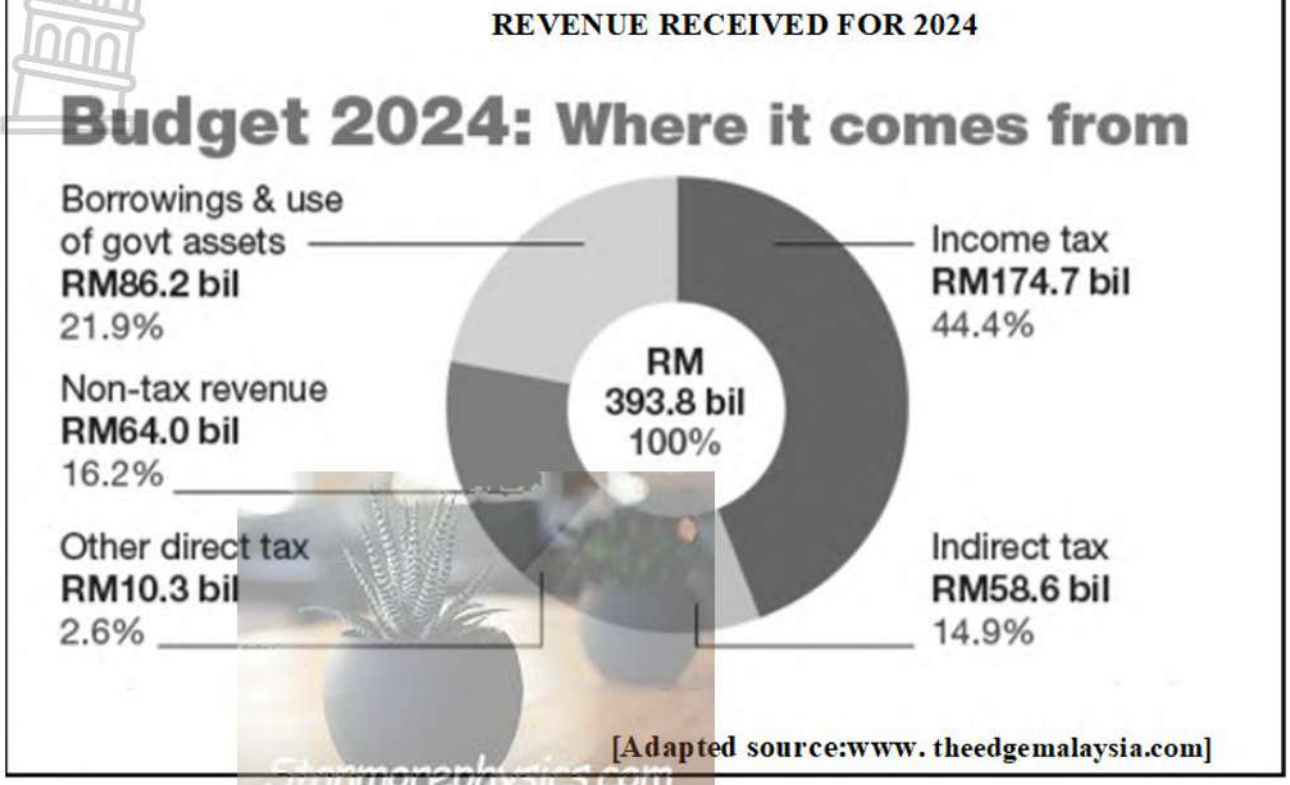
4.1.3 Identify the tax bracket his taxable income falls into. (2)

4.1.4 Lwazi's friend claims that Lwazi will not pay tax. Verify, showing ALL calculation if this claim is CORRECT. (5)

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4.2

Lwazi's friend Ahmed lives in Malaysia and studies economics. The image below shows the Budget of Malaysia, and the revenue received in 2024. The currency used in Malaysia is the Malaysian Ringgit (RM)



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Use the information above to answer the questions that follow.

4.2.1 Convert 393.8 billion to million. (2)

4.2.2 Calculate the percentage difference between Non-Tax Revenue and Indirect Tax. (2)

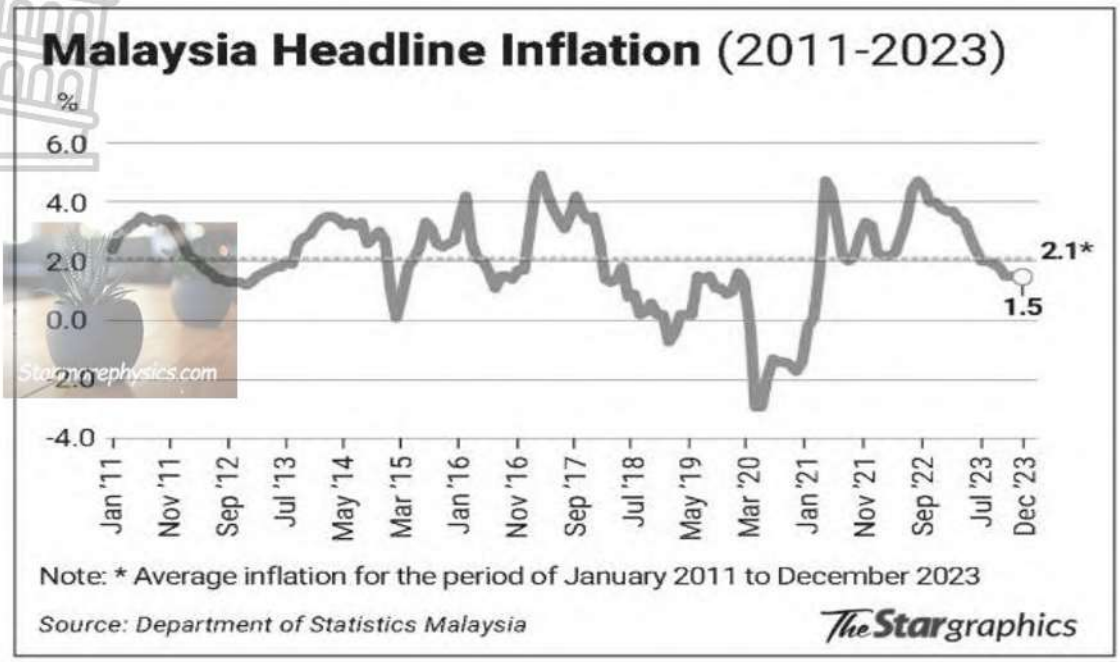
4.2.3 Malaysia's expenditure for 2024 was RM407.5 billion. State with a reason whether the budget resulted in a surplus or a deficit. (2)

4.2.4 Convert the income tax amount to South African Rands using the exchange rate of R1 = RM 0.238519. Write your answer in full using numerals. (2)

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4.3

The inflation graph below shows the average inflation rate over a period.



Use the graph above to answer the questions that follow

4.3.1 Describe the trend of the inflation rate shown above. (2)

4.3.2 In May 2019, the price of a loaf of bread was RM 2.93. Calculate the price of the loaf in March 2020. (3)

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TOTAL: [100]

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EDUCATION

REPUBLIC OF SOUTH AFRICA

NATIONAL SENIOR CERTIFICATE

GRADE 12

MATHEMATICAL LITERACY

COMMON TEST

ADDENDUM

MARCH 2025



This Addendum consists of 2 pages with 1 Annexure.

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ANNEXURE A

QUESTION 2.1

JOSEPH'S LOAN REPAYMENT WITH CHANGING INTEREST RATES TAKEN OVER 24 MONTHS

Month	1	2	3	4	5	6	7	8
Interest	770,83	741,39	711,48	681,12	650,29	618,99	587,20	554,92
Payment	2 680,94	2 680,94	2 680,94	2 680,94	2 680,94	2 680,94	2 680,94	2 680,94
Balance	48 089,89	46 150,34	44 180,88	42 181,06	40 150,41	38 088,46	35 994,72	33 868,70
Month	9	10	11	12	13	14	15	16
Interest	522,14	488,86	457,32	420,79	385,94	350,56	314,63	278,15
Payment	2 680,94	2 680,94	2 680,94	2 680,94	2 680,94	2 680,94	2 680,94	2 680,94
Balance	31 709,90	29 517,82	27 294,20	25 034,05	22 739,05	20 408,67	18 042,36	15 639,57
Month	17	18	19	20	21	22	23	24
Interest	241,11	203,50	160,83	123,03	84,66	45,72	6,19	0
Payment	2 680,94	2 680,94	2 680,94	2 680,94	2 680,94	2 680,94	418,97	0
Balance	13 199,74	10 722,30	B	5 644,28	3 048,00	412,78	0	0

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