KWAZULU-NATAL PROVINCE
EDUCATION
REPUBLIC OF SOUTH AFRICA

NATIONAL SENIOR CERTIFICATE

GRADE 12

MATHEMATICAL LITERACY

COMMON TEST

MARCH 2025

MEMO

MARKS: 100

SYMBOL	EXPLANATION
MA	Method with accuracy
MCA	Method with Consistent accuracy
A	Accuracy
C	Conversion
S	Simplification
RT	Reading from a table/ graph/ diagram/Map/Document
SF	Correct substitution in a formula
O	Opinion/Explanation
AO	Answer only full marks
P	Penalty e.g. for units, incorrect rounding off etc.
NPR	No penalty for correct rounding
NPU	No penalty for omitting unit, but wrong unit is penalised

This marking guideline consists of 7 pages.

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NOTES:

- 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.
- A conclusion mark can only be awarded if relevant calculations of at least $\frac{1}{3}$ of the maximum mark of the sub-question has been awarded.
- No penalty for rounding (NPR) if the first decimal is correct, except questions involving money.

QUESTION 1 [20 MARKS] ANSWER ONLY FULL MARKS			
Q	**Solution**	**Explanation**	**T &L**
1.1.1	Government grants and subsidies✓✓RT	2RT correct answer (2)	F L1 E
1.1.2	One million seven hundred and nineteen thousand rands.✓✓A	2A correct value (2)	F L1 E
1.1.3	37 395 000: 5 175 000✓RT 831: 115 ✓A	1RT correct values & order 1A simplified Ratio (2)	F L1 E
1.1.4	✓MA A = 302 644 – (133 258 + 37 395 + 48 341 + 5 175 + 59 353) = 19 122✓A	1MA subtracting correct values 1A correct answer (2)	F L1 E
1.1.5	Employees' salaries/Wages✓✓A **OR** Employees' Medical Aid/health Insurance✓✓A	2A correct answer (2)	F L1 E
1.2.1	Bar graph✓✓A	2A correct answer (2)	DH L1 E
1.2.2	Discrete✓✓A	2A correct answer (2)	DH L1 E
1.2.3	R23,38b; R21,25b; R9,87b; R8,60b; R5,80b; R5,75b✓✓A	2A correct answer (2)	DH L1 E
1.2.4	2021 - 2022✓A R 8,60 b ✓A	1A period 1A amount (2)	F L1 E
1.2.5	✓MA Difference = R23,38 b – R5,75b = R17,63 b✓A	1MA subtracting correct values 1A correct answer (2)	F L1 E
			[20]

QUESTION 2 [30 MARKS]			
Q	**Solution**	**Explanation**	**T &L**
2.1.1	The amount of money Joseph borrowed from FF Finance Institution✓✓O	2O correct explanation (2)	F L1 E
2.1.2	$\frac{18,5}{12}$ = 1,541666667%✓A Interest = R50 000 × 1,541666667%✓MA = R770,83 **OR** Interest = (50 000× 18,5%) ÷ 12✓A✓MA = R770,83	1A correct interest rate 1MA multiplying correct values (2)	F L1 M
2.1.3	✓MA B = R10 722,30 + R160,83 − R2 680,94✓MA = R8 202,19✓A	1MA adding correct amounts 1MA subtracting payment 1A correct answer (3)	F L2 M
2.1.4	As the balance decreases interest also decreases✓✓O	2O Explanation (2)	F L4 M
2.1.5	Real Cost of Loan = (22 × R2 680,94) + R418,97✓MA = R59 399,65✓A	1MA multiplying correct values 1A correct answer (2)	F L2 M
2.1.6	Total Interest = R59 399,65 – R50 000✓MCA = R9 399,65✓CA	**CA from 2.1.5** 1MCA subtracting correct amounts 1CA correct answer (2)	F L2 M
2.2.1	Total Fixed Charge = R70,00 + R130,00✓MA = R200,00✓A	1MA adding correct amounts 1A correct answer (2)	F L2 E

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2.2.2	Tariff Rate in Rands: 236,34 c = R2,3634 271,10 c =R2,7110 ✓C 308,91c = R3,0891 640 kWh = 350 kWh + 150 kWh − 140 kWh ✓MA ✓MA ✓MA Charge = (350 × R2,3634) + (150 ×R2,7110) + (140 ×R3,0891) = R1 666,31✓A Amount including VAT = R1 666,31 × 115%✓MCA = R1 916,26✓CA Total Paid = R200,00 + R1 916,26✓MCA = R2 116,26✓CA	1 C conversion 3MA multiplying correct kWh and tariff rate 1A correct amount 1MCA multiplying by 115% 1CA correct amount 1MCA adding correct values 1CA correct amount (9)	F L3 M
2.2.3	Amount including VAT: 115% × R756,29 = R869,73✓A Total Paid = R200,00 + R869,73✓MCA = R1 069,73✓CA Half of R2 116,26 = R2 116,26 ÷ 2 ✓MA = R1 058,13✓A R1058,13 < R1069,73 The employee's claim is INCORRECT✓O **OR** Amount including VAT: 115% × R756,29 = R869,73✓A Total Paid = R200,00 + R869,73✓MCA = R1 069,73✓CA Half of R2 116,26 = R2 116,26 × 0,5✓MA = R1 058,13✓A R1058,13 < R1069,73 The employee's claim is INCORRECT✓O	1A correct answer 1MCA adding R200 1CA correct total paid 1MA dividing by 2 1A correct answer 1O opinion **OR** 1A correct answer 1MCA adding R200 1CA correct total paid 1MA multiplying by 0,5 1A correct answer 1O opinion (6)	F L4 M
			[30]

QUESTION 3 [26 MARKS]			
Q	**Solution**	**Explanation**	**T &L**
3.1.1	Analyzing data✓✓A	2A correct answer **Accept: Representing Data** (2)	DH L2 E
3.1.2	✓ RT % pass = $\frac{84\,760}{99\,739}$ ✓ RT × 100 %✓ MA : 84,98%✓ A	1RT Correct Numerator 1RT Correct Denominator 1MA multiplying by 100 1A answer (4)	DH L2 M
3.1.3	10 892; 33 039; 35 513; 54 414; 54 567; 79 461; 84 760; 117 793; 144 990 ✓ A Median =54 567✓A Province = Mpumalanga✓A	1A arranging data 1A Median 1A Correct Province (3)	DH L2 E
3.1.4	No of learners that Failed = 705 291 – 615 429✓ MA =89 862✓ A Mean = 89 862 ÷ 9✓MCA = 9 984,67✓CA Claim is INCORRECT✓O	1MA subtracting 1A correct answer 1MCA dividing 1CA answer 1O opinion (5)	DH L4 M
3.2.1	25% of the learners in Class A achieved a mark of 84% or less✓✓O **OR** 75% of the learners in Class A achieved a mark of more than 84%. ✓✓O	2O correct explanation (2)	DH L2 M
3.2.2	✓RT IQR = 84 – 76 ✓SF = 8 ✓A	1RT correct values 1SF correct substitution 1A answer (3)	DH L3 M
3.2.3	Data needs to be arranged in ascending / descending order ✓✓A **OR** IQR only represents the middle 50% of the data.✓✓A	2A correct answer (2)	DH L1 E

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3.2.4	<table><tr><th></th><th>Class A</th><th>Class B</th></tr><tr><td>MIN</td><td>76</td><td>68</td></tr><tr><td>Q1</td><td>84</td><td>76</td></tr><tr><td>Q2</td><td>88</td><td>80</td></tr><tr><td>Q3</td><td>92</td><td>84</td></tr><tr><td>MAX</td><td>100</td><td>100</td></tr></table> ✓RT ✓RT ✓RT ✓RT The minimum, Q1, Q2 and Q3 values are higher in Class A Class A ✓A	4 RT correct values 1A Correct Class (5)	DH L3 M
			[26]

QUESTION 4 [24MARKS]

Q	Solution	Explanation	T &L
4.1.1	The tax threshold is the amount of income you can earn before you are required to pay tax.✓✓O **OR** The income level at which a person begins paying taxes.✓✓O	2O correct explanation (2)	F L1 M
4.1.2	Annual taxable income = R7 979 × 12 ✓MA = R95 748✓A	1MA multiplying by 12 1A correct value (2)	F L2 E
4.1.3	Tax bracket 1✓✓A **OR** 1 - 237 100 ✓✓A	2A correct tax bracket (2)	F L2 E
4.1.4	✓SF Annual tax =18% × R 95 748 = R17 234,64✓A Rebate = R17 234,64 - R17 235 ✓MCA = - R0,36✓CA Claim is CORRECT✓O	**CA from 4.1.2** 1SF substitution 1A correct answer 1MCA subtract 1 rebate. 1CA answer 1O opinion (5)	F L4 M

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4.2.1	Convert to million =393,8 billion × 1 000✓MA = 393 800 million✓A	1MA multiplying by 1000 1A correct answer **Accept: 393 800 000 000** (2)	F L2 E
4.2.2	Difference = 16,2% - 14,9%✓MA = 1,3%✓A	1MA subtracting correct values 1A correct answer (2)	F L2 E
4.2.3	Expenditure exceeds the Income ✓O Deficit✓A	1O correct explanation 1A correct answer (2)	F L4 E
4.2.4	Conversion = 174 700 000 000 ÷ 0,238519✓MA = R732 436 409 678,06✓A	1MA diving by 0,238519 1A correct answer Accept: R732 436 409 700 (2)	F L2 M
4.3.1	Inflation rate fluctuated from January 2011 to December 2023.✓✓O **OR** The inflation rate increases and decreases over the period.✓✓O	2O explanation (2)	F L2 M
4.3.2	✓RT ✓MA Price of Bread in March 2020 = RM 2,93 - (3% × R 2,93) =RM 2,84✓A	1RT correct inflation rate 1MA subtracting 1A correct answer (3)	F L2 M
			[24]
		TOTAL	**100**

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