KWAZULU-NATAL PROVINCE
EDUCATION
REPUBLIC OF SOUTH AFRICA

NATIONAL SENIOR CERTIFICATE

GRADE 11

MATHEMATICAL LITERACY P1

COMMON TEST

JUNE 2023

MARKING GUIDELINE

MARKS: 75

SYMBOL	EXPLANATION
M	Method
MA	Method with accuracy
CA	Consistent accuracy
A	Accuracy (Answer)
C	Conversion
S	Simplification
RT/RG/RD	Reading from a table/ graph/ diagram
NPR	No penalty for units/rounding
SF	Correct substitution in a formula
O	Opinion/ reason/deduction/example
J	Justification
R	Rounding off/
F	deriving a formula
E	Explanation
U	Units
AO	Answer only full marks

This marking guideline consists of 5 pages.

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QUESTION 1 [16 MARKS]	ANSWER ONLY FULL MARKS		
QUE	**SOLUTION**	**EXPLANATION**	**T/L**
1.1.1	Single bar graph✓✓A	2A, Answer **Accept: Bar graph** (2)	DH L1
1.1.2	Difference = \$108,90 - \$80,90 ✓M = \$28✓CA	1M, Subtracting Correct values 1CA, Answer **NPR** (2)	DH L1
1.1.3	✓RT 98,60 : 83,09 ✓A	1RT, Correct values 1A, Correct order. (2)	DH L1
1.2.1	Unemployment insurance fund✓✓A	2A, Answer (2)	F L1
1.2.2	P(UIF) = $\frac{1}{2}$ × 100% ✓M =50%✓A	1M, Probability concept 1A, Answer (2)	P L1
1.2.3	✓M Grocery spending = $\frac{30}{100}$ × R15 000 = R4 500✓A	1M, Percentage concept 1A, Answer (2)	F L1
1.3.1	R1 563 800 000 000✓✓A	2A, Answer (2)	F L1
1.3.2	✓M Vat collection = $\frac{25}{100}$ × R1563,8bn =R390,95bn ✓CA	1M, Percentage concept 1CA, Answer **Accept R390 950 000 000** (2)	F L1
		[16]	

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QUESTION 2 [22 MARKS]			
QUE	**SOLUTION**	**EXPLANATION**	**T/L**
2.1.1	An interest of 10% will be charged.✓✓RT	2RT, Correct explanation (2)	F L1
2.1.2	✓RT Labour = 40 × 23,75 ✓M = \$950	1RT, Correct values 1M, Multiplication (2)	F L2
2.1.3	✓O ✓CA For security reason, 85304412 **OR** ✓O ✓CA To avoid fraud, 85304412	1O, Reason 1CA, Completed 8-digit number **Accept any 4 digit combination** (2)	F L4
2.1.4	✓RT Amount due $= \frac{\$3\,367,20}{\$0,70532}$ ✓M = R4 774,00 ✓A	1RT, Correct Total Value 1M, Dividing by exchange rate 1A, Answer (3)	F L3
2.1.5	✓M New price = 8,45% × \$40 = \$3,38 =\$3,38+\$40✓MA =\$43,38 ✓CA **OR** ✓✓MA New price = 108,45% × \$40 = \$43,38✓CA	1M. Calculating the increase 1MA, Addition 1CA, Answer **OR** 1MA, Increasing to 108,45% 1M, Percentage concept 1CA, Answer (3)	F L2
2.2.1	✓SF %change $= \frac{R21,02-R6.73}{R6,73} \times 100\%$ $= \frac{R14,29}{R6,73} \times 100\%$✓S = 212,33%✓CA	1SF, Correct substitution 1S, Simplification 1CA, Answer (3)	F L2
2.2.2	✓M ✓M Total cost = 60 ×5,8kwh×R21,02 = R7 314,96✓CA	1M, Multiplying 5,8 by 60 1M, Multiplying by R21,02 1CA, Answer (3)	F L2
2.2.3	Standard shower head= 15ℓ× 10min = *150ℓ*✓M Low flow shower head = 8ℓ × 6min = *48ℓ*✓M Bath = *90ℓ*✓RT His statement is correct ✓J	1M, 150 litres 1M, 48 litres 1RT, 90 litres 1J, Justification (4)	F L4
		[22]	

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QUESTION 3 [22 MARKS]			
QUE	**SOLUTION**	**EXPLANATION**	**T/L**
3.1.1	Rustenburg ✓✓RT	2RT, Answer (2)	DH L2
3.1.2	Range = R38 00 – R22 000 ✓RT = R16 000✓CA	1RT, Range concept 1CA, Answer (2)	DH L2
3.1.3	Mean = $\frac{6500+8000+10000+7500+4500+5600+5000+5500+5000+4500}{10}$ ✓M = $\frac{62\,100}{10}$ ✓MA =R6 210 ✓CA	1M, Adding all correct values 1MA, Dividing by 10 1CA, Mean (3)	DH L2
3.1.4	✓ 22000;28000;29000;30000;30000;31000;32000;33000;37000;38000 Median = $\frac{R30\,000+R31\,000}{2}$ ✓MA = $\frac{R61\,000}{2}$ = R30 500 ✓A It means half (50%) of the South African workers earns above/below R30 500. ✓J	1M, Arrangement 1MA, Calculating median 1A, Median 1J, Justification (4)	DH L4
3.2.1	Gross salary is the salary earned by Ms Msweli before deductions✓✓E	2E, Correct definition (2)	F L1
3.2.2	Net = R41 435,90 – R11 823,45 ✓RT = R 29 612,39✓CA	1RT, Subtracting correct values 1CA, Answer (2)	F L2
3.2.3	Centre of research✓✓RT	2RT, Answer (2)	F L1
3.3.1	Percentages does not add up to 100% on pie chart, ✓✓A rounding of percentage. ✓E	2A, Answer 1E, Explanation (3)	DH L4
3.3.2	Company Income tax = 20% ×R1,22 billion ✓M = R0,244 billion ✓CA	1M, Multiplication of correct values 1CA, Answer (2)	DH L2
		[22]	

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QUESTION 4 [15]			
QUE	**SOLUTION**	**EXPLANATION**	**T/L**
4.1.1	Continuous. ✓A Number of litres are measured ✓E **OR** Histrogram represents continuous data ✓E	1A, Answer 1E, Explanation **OR** 1E, Explanation (2)	DH L1
4.1.2	✓M ✓M Total cost = R31,08+ (6×0) +(4×R12,50) +(5×R19,78) +(5×R23,63) +(8,3×R42,78) = R31,08+R0+R50+R98,90+R48,15+R355,074 ✓CA = R653,204 ×115%✓M = R751,18✓CA	1M, Adding water demand levy 1M, Adding correct rates 1CA, Amount before VAT 1M, Adding VAT (15%) 1CA, Total cost (5)	F L3
4.2.1	Total cost = R274,36 +R520,38 ✓RT =R 794,74 ✓CA	1RT, Adding correct values 1CA, Answer (2)	F L2
4.2.2	✓A P(erf<800m^2) = $\frac{3}{4}$ ×100% ✓A = 75%✓CA	1A, Numerator 1A, Denominator 1CA, Answer (3)	P L2
4.2.3	✓M Percentage = $\frac{892\,277}{1\,035\,375}$ ×100%✓MA = 86,18% His statement is incorrect. ✓J	1M, Dividing correct values 1MA, Percentage concept 1J, Justification (3)	HD L4
		[15]	
		TOTAL MARKS: 75	

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