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education
Department:
Education
PROVINCE OF KWAZULU-NATAL

PINETOWN DISTRICT – MATHEMATICAL LITERACY

GRADE: 11
ASSESSMENT TYPE: November Formal Test - Paper One
MARKING GUIDELINE

Symbols	Explanation
M	Method
MA	Method with accuracy
CA	Consistent Accuracy
A	Accuracy
C	Conversion
RT/RG/RM	Reading from Table/Graph/Map.
F	Choosing the correct formula
SF	Substitution in Formula
J	Justification
P	Penalty
R	Reason

QUESTION NUMBER	SOLUTION	MARK EXPLANATION	MARKS	SECTION & TAX LEVEL
QUESTION 1				
1.1.1	A = R23.49 – R22.99 ✔ MA = R0.50 ✔ A	1 MA 1 A	2	F L1
1.1.2	B = R8 + R18 + R21.39 + R22.99 + R39.99 ✔ MA = R110.37 ✔ CA C = R 8.50 + R18.99 + R21.99 + R23.49 + R 39.99 ✔ MA = R112.96 ✔ CA	1 MA 1 CA 1 MA 1 CA	4	F L1
1.1.3	$\%\ increase = \frac{(R112.96 - R110.37)}{R110.37}$ ✔ SF(from 1.1.2) = 2.35% ✔ CA	1SF 1CA NPR	2	F L2
1.1.4	INFLATION ✔ ✔ A	2A	2	F L1

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1.2.1	Cost = R3.85 X 55 Km X 2 ✔ MA X 5 ✔ MA = R2 117.50 ✔ CA	1MA 1MA 1CA AO	3	F L2
1.2.2	Cost = R125 X 2 X 5 ✔ MA = R1 250 ✔ CA	1 MA 1 CA AO	2	F L1
1.3.1	17 19 21 23 25 26 26 27 28 29 ✔ ✔ A	2 A	2	DH L1
1.3.2	7 ✔ ✔ A	2 A	2	DH L1
1.3.3	Mode refers to the temperature that appears the most frequently. ✔ ✔ R	2 R (1 mark if not in context)	2	DH L2
QUESTION 2				
2.1.1	30 + 31 + 28 = 89 ✔ A 13 statements ✔ RT	1A 1RT	2	F L1
2.1.2	(3 x R12.50) + R5.25 + R13.10 + R9.15 ✔ RT = R65 ✔ A	1RT 1A	2	F L1
2.1.3	R5.60 + R6.55 + R 6.55 + R14 ✔ MA = R32.70 ✔ CA	1MA adding correct values 1CA	2	F L1
2.1.4	R12.50 + R5.25 + R12.50 + R13.10 + R19.60 + R12.50 + R12.50 + R9.15 + R7 ✔ MA = R91.60 ✔ CA Vat = R91.60 × $\frac{15}{115}$ ✔ M = R11.95 OR Price excl vat = R91.60 ÷ 1.15 = R79.65 Vat = R91.60 – R79.65 = R11.95	1MA 1CA 1M	3	F L3
2.1.5	$R3.95 = \left(R1.30 \times \frac{600}{100}\right) = R11.75$ ✔ A $R3.95 = \left(R1.30 \times \frac{600}{100}\right) = R11.75$ $R0.70 \times 9 = R6.30$ ✔ A $R1.65 \times 25 = R41.25$ ✔ A Total = R11.75 + R 11.75 + R6.30 + R41.25 = R71.05 ✔ CA	3A 1CA	4	F L3

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GOOD DAY

DUE TO INTERPRETATION OF QUESTION 2.1.5. (GRADE 11 PAPER 1), PLEASE ACCEPT THE FOLLOWING ANSWER.

2.1.5.

(R1,30 x $\frac{600}{100}$)=R 7,80✓

R0,70 x 9 =R 6,30✓

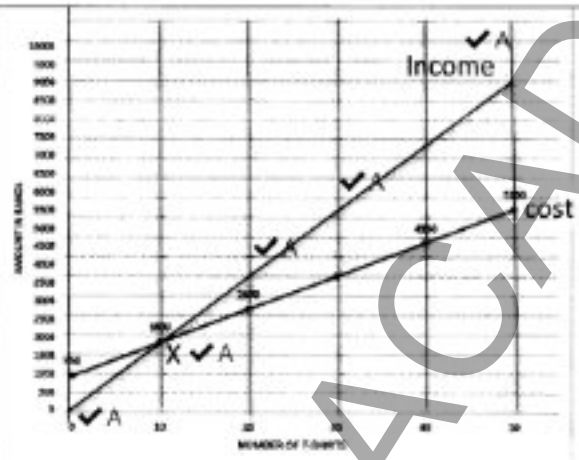
R1,65 x 25 =R41,25✓

Total= R7,80+R6,30+R41,25

=R55,35✓

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2.2.1	UNEMPLOYMENT INSURANCE FUND ✔ ✔A	2A	2	F L1
2.2.2	$R2800 \div 5\%$ ✔MA $= R56\,000$ ✔A His claim is correct. ✔J Or $R56\,000 \times 5\%$ ✔MA $= R2\,800$ ✔A His claim is correct. ✔J	1MA 1A 1J	3	F L4
QUESTION 3				
3.1	I = R180 ✔ ✔A x Number of T-Shirts	2A	2	F L1
3.2	A = R180 x 10 ✔MA =R1 800 ✔CA B = R950 + (30 x R85) ✔MA = R3 500 ✔CA C = R50 x R180 ✔MA = R9 000 ✔CA	3MA 3CA	6	F L2
3.3		1A Start 0 1A two other correct points 1 CA Joining points 1A Label income line 1CA Label break-even point with letter X	5	F L3
3.4	Break-Even is when the income from sale of Sports T-Shirts and the cost of the Sports T-Shirts are equal. ✔ ✔E	2E Penalise 1 if not defined in context	2	F L2
3.5	P = I – E P = (45 x R180) – [R950 + (45 x R85)] ✔M = R8 100 ✔A + R4 775 ✔A = R3 325 ✔CA He is CORRECT. R3325 > R3 000 ✔j	1M 1A 1A 1CA 1J	5	F L4
QUESTION 4				
4.1	To encourage people to save water. To help the poor since water is a basic necessity. ✔ ✔E	2E (ANY ONE)	2	F L2

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4.2	Step 2 ✔ ✔ A	2A	2	F L2
4.3	The more water you use, the more you will pay. ✔ ✔ E	2E		F L2
4.4	Cost excl vat = (6 x R0) + (4.5 x R15.98) + (9.5 x R18.75) + (15 x R21.24) + (3 x R24.78) ✔ MA = R0 + R71.91 + R178.13 + R318.60 + R74.34 = R642.98 ✔ CA Cost incl vat = R642.98 x 1.15 ✔ MCA = R739.43 ✔ CA His uncle was INCORRECT ✔ J	1MA 1CA 1MCA 1CA 1J	5	F L4
4.5	Collect rain water (Jo-Jo tanks) ✔ E Repair leaks ✔ E	2E (ANY 2)	2	F L2
4.6	Price excl VAT = $R409.67 \times \frac{100}{115}$ ✔ MA = R356.23 ✔ A R356.23 – R71.91 – R178.13 ✔ MCA = R106.19 ✔ CA No, of kl $R106.19 \div R21.24$ ✔ M = 4.9995 kl = 5kl ✔ CA Total kl used = 6 + 4.5 + 9.5 + 5 = 25 kl ✔ CA	1MA 1A 1MCA 1CA 1M 1CA 1CA	7	F L3
QUESTION 5				
5.1	Discrete ✔ A Data are all whole numbers, no decimal points. ✔ J	1A 1J	2	DH L2
5.2	MEAN 11B = $\frac{\text{SUM OF SCORES}}{\text{NUMBER OF SCORES}}$ = $\frac{496}{11}$ ✔ MA = 45.09 ✔ CA	1MA 1CA denominator must be correct	2	DH L1

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5.3	MEAN = $\frac{SUM\ OF\ SCORES}{NUMBER\ OF\ SCORES}$ $62\surd = \frac{A+530}{10}$ ✔MA A+530 = 620 ✔CA A = 90 ✔CA	1MA 1CA 1CA	3	DH L3
5.4	90 75 69 68 68 62 53 53 42 40 ✔A Median = $\frac{(68+62)}{2}$ ✔M = 65 ✔CA	1A arrangement 1M concept of average 1CA	3	DH L2
5.5	68 ✔✔A	2A	2	DH L1
5.6	11C ✔O HIGHER MEDIAN THAN 11 HIGHEST MARK OF 90 ALL LEARNERS PASSED AVERAGE MARK IN 11C IS HIGHER ✔✔J (ANY 2 REASONS)	1O 2J (ANY 2)	3	DH L4
5.7	$\frac{8}{21}$ ✔A × 100 = 38.1% ✔CA CORRECT ✔J	1A 1CA denominator must be correct 1J	3	DH L4
5.8	P (>50) = $\frac{4}{11}$ ✔A × 100 ✔M = 36.36% ✔CA	1A 1M % concept 1CA denominator must be correct	3	PROB L1

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MATHEMATICAL LITERACY

TAXONOMY LEVELS

TASK: November Paper 1 - 2022 GRADE: 11

QUESTION	MARK	TOPICS								
		FINANCE	MEASUREMENT	MAPS AND PLANS	DATA HANDLING	PROBABILITY				
1.1.1	2	2					2			
1.1.2	2	2					2			
1.1.3	2	2						2		
1.1.4	2	2					2			
1.2.1	3	3						3		
1.2.2	4	4					4			
1.3.1	2				2		2			
1.3.2	2				2		2			
1.3.3	2				2			2		
2.1.1	2	2					2			
2.1.2	2	2					2			
2.1.3	2	2					2			
2.1.4	3	3							3	
2.1.5	4	4							4	
2.2.1	2	2					2			
2.2.2	3	3								3
3.1	2	2					2			
3.2	6	6						6		
3.3	5	5							5	
3.4	2	2						2		
3.5	5	5								5
4.1	2	2						2		
4.2	2	2						2		
4.3	2	2						2		
4.4	5	5								5
4.5	2	2						2		
4.6	7	7							7	
5.1	2				2			2		
5.2	2				2		2			
5.3	3				3				3	
5.4	3				3			3		
5.5	2				2		2			
5.6	3				3					3
5.7	3				3					3
5.8	3			3			3			
TOTAL MARKS	100	73		3	24		31	28	22	19
CAPS WEIGHTING							30%	30%	20%	20%
% WEIGHTING		73%		3%	24%		31%	28%	22%	19%

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