Grade 11 **Bergvliet High School** **November 2023**

Mathematical Literacy - Paper 2 Memorandum

Question 1			**Question 2**		
1.1.1	4 ✓✓	(2)	2.1	15,6cm ✓✓	(2)
1.1.2	gveden@overstrand.gov.za ✓✓	(2)	2.2	V = 3,142 × 15,6^2 × 56,16cm ✓ = 42 942,02 cm^3 ✓ 42 942,02 cm^3 ÷ 1000 ✓ = 42,94 *l* ✓ = 43 L ✓	(5)
1.1.3	South-West ✓✓	(2)	2.3	120cm ÷ 31,2cm = 3 buckets ✓ 100cm ÷ 31,2cm = 3 buckets ✓ 3 × 3 = 9 buckets ✓	(3)
1.1.4	Without power / no caravans ✓✓	(2)			
			2.4	Area of pallet = 120cm × 100cm = 12 000 cm^2 ✓ Area of buckets = 9 × (3,142 X 15,6cm^2) ✓ = 6881,73 cm^2✓ 12 000 cm^2 - 6881,73 cm^2 ✓ = 5118,27 cm^2 ✓	(5)
1.2.1	Table **or** desk ✓✓	(2)			
1.2.2	6 ✓✓	(2)			
1.2.3	4 legs ✓✓	(2)			
1.3.1	Tree diagram ✓✓	(2)	2.5	7 × 2,54 ✓ = 17,78cm ✓ Therefore, he is incorrect. ✓	(3)
1.3.2	9 ✓✓	(2)			
1.3.3	a) Seed ✓		2.6	$\frac{25}{40}$ ✓✓ = 0,625 ✓	(3)
	b) BT ✓	(2)			
		[20]			**[21]**

Question 3		
3.1.1	Settlers Hospital ✓✓	(2)
3.1.2	West ✓✓	(2)
3.1.3	7,5cm × 150 000 ✓ = 1 125 000 cm ✓ ÷ 100 000 ✓ = 11,25 km ✓	(4)
3.2.1	779km ✓✓	(2)
3.2.2	Time = $\frac{distance}{speed}$ = $\frac{779km}{120km/h}$ ✓ = 6,49 hours ✓ Total time = 6,49 hours + 1 hr + 0,5hr +0,5hr ✓ = 8,49 hrs ✓ = 8hrs✓ and 29 min ✓	(6)
3.2.3	779km ÷ 20km/l ✓= 39,95L ✓ 39,95*l* × R21,45 ✓ = R835, 48 ✓	(4)
3.3	300 × R20,92 ✓ = R6276 ✓✓	(3)
		[22]

Question 4		
4.1	5 doors ✓✓	(2)
4.2	Bath ✓ Toilet ✓ Basin ✓	(3)
4.3.1	Area = 3,7m X 2,9m ✓ = 10,73m^2 ✓ = 11 m^2 ✓ X 2 ✓ = 22 m^2 ✓	(5)
4.3.2	$\frac{1}{3}$ ✓✓	(2)
4.4.1	M9 ✓ & M18 ✓	(2)
4.4.2	N2 ✓✓	(2)
4.4.3	R75 ✓✓	(2)
4.4.4	6 provincial roads ✓✓ **OR** R75; R102; R334; R335; R367; R368 ✓✓	(2)
4.4.5	Measured distance : 5cm 5cm : 13km ✓ 5cm : 1 300 000cm ✓ 5cm : 1 300 000cm 5cm 5cm ✓ 1 : 260 000 ✓ Yes, his statement is valid ✓✓	(6)
		[28]

Question 5		
5.1.1	12 miles Distance = 12 x 1,609 ✓ = 19,308 km ✓	(2)
5.1.2	Humidity of Cape Town = $\frac{68}{100}$ ✓ ✓ = $\frac{17}{25}$ ✓	(3)
5.1.3	Time of sunset in Cape Town = 17:27 12-hour format = 05:27✓pm ✓	(2)
5.1.4	$^{o}F = (^{o}C \times 1,8) + 32$ = (17 x 1,8) + 32 ✓ = 62,6 ✓ = 63 ^{o}F ✓	(3)
5.2.1	Volume = Length x Width x Height = 30 in x 12 in x 7,1 in ✓ = 2 556 in^3 ✓✓	(3)
5.2.2	Volume of the tank = 2 556 in^3 x 85% ✓ = 2 172,6 in^3 ✓ Increased volume after the stones added = 2 556 x 97% = 2 479,32 in^3 ✓ Volume of stones = 2 479,32 in^3 - 2 172,6 in^3 ✓ = 306,72 in^3 ✓ **OR** Volume of stones = 97% - 85% ✓✓ = 12% x 2 556 ✓✓ = 306,72 in^3 ✓	(5)
		[28]