KWAZULU-NATAL PROVINCE
EDUCATION
REPUBLIC OF SOUTH AFRICA

FINAL

NATIONAL SENIOR CERTIFICATE

GRADE 12

MATHEMATICAL LITERACY P2

JUNE EXAMINATION

MARKING GUIDELINE

2025

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MARKS: 100

Symbol	Explanation
MA	Method with Accuracy
CA	Consistent Accuracy
MCA	Method with Consistent Accuracy
A	Accuracy (Answer)
AO	Answer only full marks
C	Conversion
S	Simplification
RT	Reading from table / Reading from graph / Reading from map/Reading from plan
SF	Substitution in formula
O	Opinion/ Explanation
J	Justification
P	Penalty e.g. for no units, incorrect rounding, etc
R	Rounding
NPR	No penalty for rounding
NPU	No penalty for omitting units but incorrect unit is penalised

This marking guideline consists of 8 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 [25 MARKS] ANSWER ONLY FULL MARKS			
Ques	**Solution**	**Explanation**	**T&L**
1.1.1	BMI status classifies a person's BMI into weight categories such as underweight, healthy weight, over weight and obese.✓✓O	2O correct explanation (2)	M L1 E
1.1.2	Underweight✓✓RT	2RT correct answer (2)	M L1 E
1.1.3	BMI = 25✓✓RT	2RT correct answer (2) **Accept: 23 to 25**	M L1 E
1.1.4	Number of kg = 225 ÷ 2,20462✓MA = 102,06 kg✓A	1MA dividing by 2,20462 1A correct answer (2)	M L1 M
1.1.5	It's an unhealthy weight status that leads to co-morbidities/ disease✓✓O	2O correct explanation (2)	M L1 E
1.2.1	Layout plan /map ✓✓RT	2RT correct answer (2) **Accept: Street map**	MP L1 E
1.2.2	N3✓✓RT	2RT correct answer. (2)	MP L1 E
1.2.3	North West ✓✓RT **OR** NW✓✓RT	2RT correct answer. (2)	MP L1 E
1.2.4	Left turn✓✓RT **OR** Turn left ✓✓RT	2RT correct answer. (2)	MP L1 E

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1.2.5	It's on the corner of Botanic Gardens Road and Steve Biko Road.✓✓RT **OR** Opposite Greyville Racecourse/ Steve Biko Campus.✓✓RT **OR** Corner of ML Sultan and Steve Biko✓✓RT **OR** Corner of Sparks Rd/Overport Dr/Sydenham Rd and ML Sultan✓✓RT	2RT correct answer. (2)	MP L1 E
1.2.6	Time = 15:56 + 7 mins✓MA = 16:03✓A = 4:03pm✓A	1MA adding 1A correct answer. 1A correct format (3)	MP L1 E
1.2.7	Berea Road North ✓✓RT **OR** Berea Road South ✓✓RT	2RT correct answer (2)	MP L1 E
		[25]	

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QUESTION 2 [24 MARKS]			
Ques	**Solution**	**Explanation**	**T&L**
2.1.1	Floor plan✓✓A	2A correct answer (2)	MP L1 E
2.1.2	Floor plan shows aerial/top/birds eye view.✓O Elevation shows the front/back and side view of the building/height of buildings/windows/doors✓O	2O correct explanation (2)	MP L1 E
2.1.3	Side/Wall of the floor plan with two windows✓✓A	2A correct answer (2)	MP L2 M
2.1.4	Measured Length = 9,5cm ✓A Actual length = 25cm+550cm+25cm+680cm+25cm ✓MA = 1305cm ✓A 9,5cm = 1 305cm✓MA 1 cm = 137,368cm✓S 1:137✓R	1A measuring length 1MA adding 1A correct answer 1MA concept of scale 1S simplification 1R rounding (6) **Accept leeway of 1**	MP L3 M
2.2.1	Robben Island✓✓RT	2RT correct answer (2)	MP L2 E
2.2.2	7 ✓✓RT	2RT correct answer (2)	MP L2
2.2.3	Bar/Line /Graphic scale ✓✓A	2A correct answer (2)	MP L1 E
2.2.4	1,3cm on the map represents 10km in reality✓✓O **OR** 13mm on the map represents 10km in reality✓✓O	2O correct explanation **Accept leeway of 0.1cm/1mm** (2)	MP L2 E
2.2.5	Distance on the map = 5,3 cm ✓A ✓MCA Actual distance = (5,3cm × 10) ÷ 1,3✓MCA = 40,77km✓CA **OR** Distance on the map = 53 mm ✓A ✓MCA Actual distance = (53mm × 10) ÷ 13✓MCA = 40,77km✓CA	**CA from Q2.2.4** 1A correct distance 1MCA multiplying by 10 1MCA dividing by 1,3 1CA answer **OR** 1A correct distance 1MCA multiplying by 10 1MCA dividing by 13 1CA answer **Accept leeway of 1 NPR** (4)	MP L3 M
		[24]	

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QUESTION 3 [27 MARKS]			
Ques	**Solution**	**Explanation**	**T& L**
3.1.1	Perimeter = 4 (7m) ✓SF =28m✓A	1SF substitution 1A correct answer (2)	M L2 E
3.1.2	Gate in metres = 90cm ÷ 100✓C =0,9 m ✓MA ✓MA Lengths of Fencing = [28m – (4 × 0,9m)] ÷ 1,2m = 20,33✓CA = 21✓R	**CA from Q3.1.1** 1C conversion 1MA subtracting 4 gates 1MA dividing by 1,2 1CA answer 1R rounding (5)	M L3 M
3.1.3	✓MCA ✓MCA ✓MA Total cost = (R330×21) + (R495 × 4) + (R250×2) = R9 410 ✓CA	**CA from Q3.1.2** 1MCA multiplying by 21 1MCA multiplying by 4 1MA multiplying R250 by 2 1CA answer (4)	M L2 M
3.1.4	Probability (Lavender) = $\frac{2✓A}{14✓A}$ × 100 %✓MA = 14,29%✓A	1A numerator 1A denominator 1MA percentage concept 1A answer **NPR** (4)	P L2 E
3.1.5	Probability (roses) = 0✓✓A	2A Correct Answer (2)	P L2 E

3.2.1	Radius of the pond = 1,35 m ÷ 2✓MA = 0,675 m✓A	1MA dividing by 2 1A correct answer **AO** (2)	M L1 E
3.2.2	Area of garden = 4,5 m × 3,2 m✓SF = 14,4m²✓A Area of the pond = 3,142 × (0,675 m)²✓SF = 1,43157375 m²✓CA Area of paving = 14,4m² - 1,43157375 m² = 12,97m²✓CA	**CA from Q3.2.1** 1SF substitution 1A correct Area 1SF substitution 1CA correct Area 1CA Correct answer **NPR** (5)	M L3 M
3.2.3	Number of bricks = 12,97m² ÷ 0,45m²✓MCA = 28,82✓CA = 29✓R	**CA from Q3.2.2** 1MCA dividing by 0,45 1CA answer 1R rounding (3)	M L2 M
		[27]	

QUESTION 4 [24 MARKS]			
Ques	**Solution**	**Explanation**	**T &L**
4.1.1	Diameter = 18cm × $\frac{2}{3}$✓MA = 12cm✓A Radius = 12cm ÷ 2✓MCA = 6cm✓CA SA= (2 × 3,142 × (6cm)^2) + (2 × 3,142 × 6cm × 18cm)✓SF = 904,896 cm^2✓CA	1MA multiplying by $\frac{2}{3}$ 1A correct answer 1MCA dividing by 2 1CA answer 1SF substitution 1CA correct answer (6)	M L4 D
4.1.2	SA = 904,896 cm^2 ÷100^2✓C = 0, 0904896 m^2 Number of cylinders = 1m^2 ÷ 0,0904896✓MCA = 11,05 ✓CA = 11✓R	**CA from Q4.1.1** 1C conversion 1MCA dividing by 0,0940896 1CA answer 1R rounding (4)	M L3 M
4.1.3	Weight of sweets in grams = 0,45 × 1000✓C = 450g✓A Number of sweets = 450g ÷ 25✓MA = 18 ✓A **OR** Weight of sweets in kg = 25 ÷ 1000✓C = 0,025 kg✓A Number of sweets = 0,45 ÷ 0,025✓MA = 18 ✓A	1C conversion 1A Correct answer 1MA dividing by 25 1A correct answer **OR** 1C conversion 1A correct answer 1MA dividing by 0,025 1A correct answer (4)	M L3 M

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4.2.1	300kg = 300 litres 300 litres = 300 000cm^3✓C Radius = 30cm✓A 300 000cm^3 = 3,142 × (30cm)^2 × height✓SF Height $= \frac{300\,000}{3{,}142 \times 900}$ ✓S =106,09cm ÷ 100 = 1,06 m✓CA The claim is incorrect✓O	1C convert to cm^3 1A radius 1SF substitution 1S simplification 1CA answer 1O Conclusion **NPR** (6)	M L4 D
4.2.2	Capacity = 250mℓ × 95%✓MA = 237,5mℓ 300 litres = 300 000 mℓ✓C Number of bottles = 300 000mℓ ÷ 237,5mℓ✓MCA = 1263,15 =1263✓R	1 MA multiplying by 95% 1C convert to mℓ 1MCA dividing by 237,50 1R Rounding (4)	M L3 M
		[24]	
		TOTAL MARKS: 100	

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