SOUTH AFRICAN COMPREHENSIVE ASSESSMENT INSTITUTE
SUID-AFRIKAANSE KOMPREHENSIEWE ASSESSERINGSINSTITUUT

Adult Basic Education and Training (ABET)

Marking Guideline

Mathematical Literacy: NQF Level 1

Examination Session: June 2024

Total Marks: 100 Marks

Symbol	Explanation
A	Accuracy; answer must be exactly as given.
AO	Answer only: if correct, full marks.
CA	Consistent Accuracy. Continue marking, using the candidate's answer.
J	Justification
M	Method
MA	Method with accuracy
O	Opinion
P	Penalty, e.g. for no units, incorrect rounding off, etc.
R	Rounding off
RT/ RG/ RM/ RS	Reading from a table/ graph/ map/ scale
S	Simplification
SF	Substitution in the formula

ANSWERS

		Mark Allocation	Explanation
QUESTION 1			
1.1			
1.1(a)	Sixty-three million, seven hundred and twenty-six thousand, six hundred and fifty-four. √√	2	A
1.1(b)	$\frac{2\,193\,894}{61\,532\,760} \times 100$ √	1	A
	$= 3{,}6\%$ √	1	A
1.2	Hundredths √	1	A
1.3	7^{6-4} √	1	A
	7^2 √	1	A
1.4	$\frac{1}{5} \times 5$ √	1	MA
	$= 1$ √	1	A
	ALTERNATIVE:		
	$5^{-1} \times 5^1$ √	1	MA
	$5^{-1+1} = 5^0 = 1$ √	1	A
1.5	3 000 000 √		
	ALTERNATIVE:	1	R
	Three million √		

QUESTION 2

2.1(a)	$\sqrt{25 \times 2}$ √		1	A
	$5\sqrt{2}$ √		1	A
2.1(b)	$\frac{5}{7} \times \frac{7}{25}$ √		1	A
	$\frac{1}{5}$ √		1	A
2.2	$1 + 6 - 81$ √		1	A
	$= -74$ √		1	A
2.3	$4p = 120$ √		1	A
	$p = 30$ √		1	A

Question 3

3.1(a)	$926\,765 \times \frac{1}{3}$ √		1	A
	$= R\,308\,922$ √		1	A
3.1(b)	$926\,765 - 308\,922$ √		1	CA
	$= R\,617\,843$ √		1	CA
3.1(c)	$617\,843 \times \frac{25}{100}$			
	$= 154\,461$ √		1	CA
	$\therefore 617\,843 - 154\,461$			
	$= R\,463\,382$ √		1	CA
3.1(d)	$\frac{463\,382}{4200}$ √		1	CA
	$= \frac{110}{12}$			
	$\therefore = 9$ √		1	CA
	ALTERNATIVE:			
	$\frac{463\,382}{4200 \times 12}$ √		1	CA

	$\therefore = 9$ √	1	CA

Question 4

4.1(a)	True √	1	A
4.1(b)	False √	1	A
4.2	$d = 115 \times 3$ √	1	SF
	$\therefore$ Distance $= 345$ km √	1	A
4.3	$P = 9 + 9 + 6 + 6$ √	1	A
	$Perimeter = 30\ cm$ √	1	A
4.4	$Area\ of\ Circle = 3.14 \times 36$		
	$= 113{,}04\ Square\ units$ √	1	S
	$Area\ of\ Square = 12 \times 12$		
	$= 144\ Square\ units$ √	1	S
	$\therefore Shaded\ Area = \frac{144 - 113{,}04}{2}$		
	$\therefore Shaded\ Area = 15.48\ Square\ units$ √	1	CA
4.5	$5^2 = 3^2 + y^2$ √	1	SF
	$y = \sqrt{16}$ √	1	S
	$\therefore y = 4\ m$ √	1	A

Question 5

5.1	Sphere ✓	1	A
5.2	E ✓ and L ✓ (Order not important.)	2	A
	ALTERNATIVE: Rectangle ✓ and circle ✓ (Order not important.)	2	A
5.3	True ✓	1	A
5.4	G ✓	1	A
	ALTERNATIVE:		
	Trapezium ✓	1	A

Question 6

6.1	$a + 80^0 + 64^0 = 180^0$ ✓ angles on a straight line. ✓	2	A
	$\therefore a = 36^0$ ✓	1	A
6.2	$b = a$ ✓ corresponding angles	1	CA
	$\therefore b = 36^0$ ✓	1	CA
6.3	$c = 36^0 + 64^0$ ✓ corresponding angles ✓	2	A
	$\therefore c = 100^0$ ✓	1	A
	ALTERNATIVE:		
	$80^0 + c = 180^0$ ✓ co-interior angles✓	2	A
	$\therefore c = 100^0$ ✓	1	A

Question 7

7.1	$\frac{AC}{BC} = \frac{CE}{CD}$ ✓		1	F
	$\frac{AC}{15} = \frac{20}{15}$ ✓		1	SF
	$\therefore AC = 20$ ✓		1	A
	ALTERNATIVE:			
	$\frac{AC}{CE} = \frac{AB}{DE}$ ✓		1	F
	$\frac{AC}{20} = \frac{13}{13}$ ✓		1	SF
	$\therefore AC = 20$ ✓		1	A
	ALTERNATIVE:			
	$\frac{AC}{CE} = \frac{BC}{CD}$ ✓		1	F
	$\frac{AC}{20} = \frac{15}{15}$ ✓		1	SF
	$\therefore AC = 20$ ✓		1	A
7.2	$Area\ of\ LSRN = 12 \times 7 = 84\ cm^2$ ✓		1	A
	$Area\ of\ \Delta KLR = \frac{1}{2} \times 3 \times 7 = 10.5\ cm^2$	✓	1	A
	$Area\ of\ \Delta SMN = 10.5\ cm^2$ ✓		1	A
	$\therefore Area\ of\ KLMN = 84 + 10.5 + 10.5$ ✓		1	A
	$Area\ of\ KLMN = 105\ cm^2$ ✓		1	A
7.3	$16 \times 50\ 000$ ✓		1	A
	$\frac{800\ 000}{1\ 000}$ ✓		1	A
	800 ✓		1	A

Question 8

8.1	$Shaded\ perimeter\ of\ semi\ circle = \frac{3{,}14 \times 6}{2} + 6 = 15{,}42\ cm$ √	1	SF
	$Shaded\ perimeter\ of\ circle = 3{,}14 \times 3 = 9{,}42\ cm$ √	1	SF
	$\therefore Shaded\ perimeter = 15{,}42 + 9{,}42\ m$ √	1	A
	$Shaded\ perimeter = 24{,}84\ cm$ √	1	CA
8.2	$Volume\ of\ taller\ prism = 12 \times 5 \times 6 = 360\ cm^3$ √	1	SF
	$Volume\ of\ shorter\ prism = 8 \times 10 \times 6 = 480\ cm^3$ √	1	SF
	$Volume\ of\ the\ object = 360 + 480$		
	$\therefore Volume\ of\ object = 840\ cm^3$ √	1	CA

Question 9

9.1	22 √	1	RT
9.2	36 √	1	A
9.3	$\frac{47 + 49}{2}$ √	1	A
	$Median = 48$ √	1	A
9.4	$Mean = \frac{1\,144}{22}$ √	1	M/A
	$= 52$ √	1	A
9.5	$Range = 77 - 33$ √	1	RT
	$= 44$ √	1	A

9.6

Class Interval	Tally	Frequency
30 – 49	~~////~~ ~~////~~ /// √	**13** √
50 – 69	~~////~~	5
70 – 100	////	4

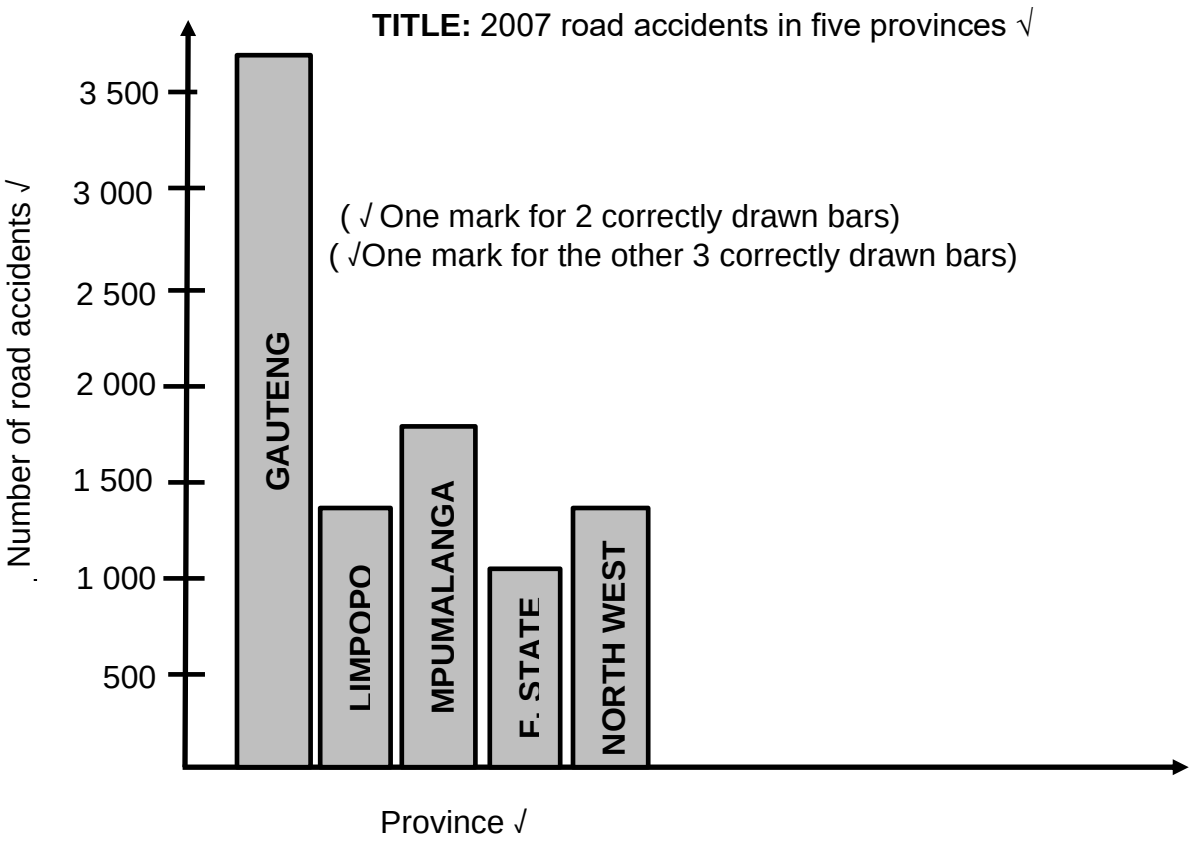
2 A

Question 10

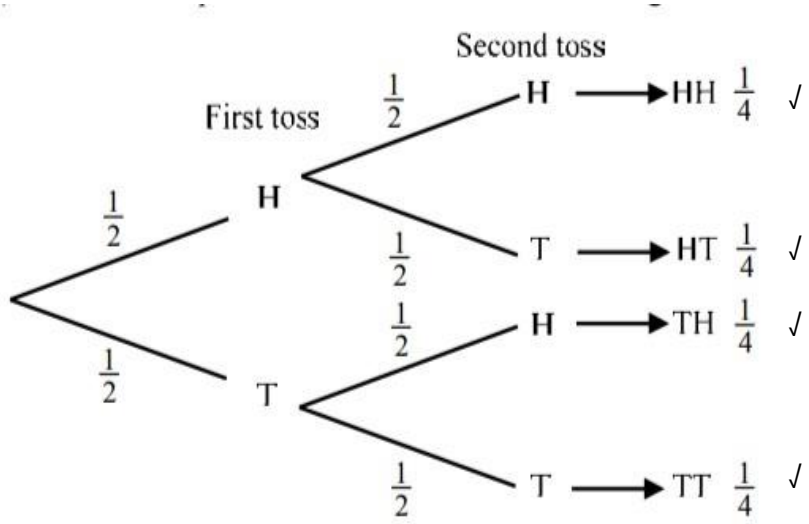
10.1	Five Flavours of energy drinks in 500 ml cans √	1	A
10.2	C √	1	RT
10.3	B √ and D √ (order not important)	1	RT
10.4	$2\,500 - 1\,000$ √	1	RT
	$= 1\,500$ √	1	CA
10.5	$\frac{1\,500}{3\,500} \times 100$ √	1	RT
	$= 43\%$ √	1	CA

Question 11

11.1 5 A



Question 12

12.1	$\frac{1}{6}$ √√	2	A	
12.2	$\frac{1}{6} \times 500$ √	1	A	
	$= 83$ √	1	A	
12.3		4	A	

Total: (100)