<table>
<thead>
<tr>
<th>Codes</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>M</td>
<td>Method</td>
</tr>
<tr>
<td>MA</td>
<td>Method with Accuracy</td>
</tr>
<tr>
<td>CA</td>
<td>Consistent Accuracy</td>
</tr>
<tr>
<td>A</td>
<td>Accuracy</td>
</tr>
<tr>
<td>C</td>
<td>Conversion</td>
</tr>
<tr>
<td>D</td>
<td>Define</td>
</tr>
<tr>
<td>J</td>
<td>Justification/Reason/Explain</td>
</tr>
<tr>
<td>S</td>
<td>Simplification</td>
</tr>
<tr>
<td>RD</td>
<td>Reading from a table OR a graph OR a diagram OR a map OR a plan</td>
</tr>
<tr>
<td>F</td>
<td>Choosing the correct formula</td>
</tr>
<tr>
<td>SF</td>
<td>Substitution in a formula</td>
</tr>
<tr>
<td>O</td>
<td>Opinion</td>
</tr>
<tr>
<td>P</td>
<td>Penalty, e.g. for no units, incorrect rounding off, etc.</td>
</tr>
<tr>
<td>R</td>
<td>Rounding Off</td>
</tr>
<tr>
<td>NP</td>
<td>No penalty for rounding OR omitting units</td>
</tr>
</tbody>
</table>

This memorandum consists of 17 pages.
### KEY TO TOPIC SYMBOL:

- **F** = Finance
- **M** = Measurement
- **MP** = Maps, Plans and other representations
- **DH** = Data Handling
- **P** = Probability

### QUESTION 1 [38]

<table>
<thead>
<tr>
<th>Ques</th>
<th>Solution</th>
<th>Explanation</th>
<th>Level</th>
</tr>
</thead>
</table>
| 1.1.1 | $67 \times 2 + 16 = 150$ | 1MA multiply by 2 and adding 16
1CA simplifying | L1 |
| 1.1.2 | Cost = $R225,00 \times 152 = R34\,200$ | 1M multiply by $R225$
1A for 152 | L1 |
| OR | Number of persons = $R34\,200 \div R225 = 152$ | 1M divide by $R225$
1A number of persons | |
| (150 guests + bridal couple) | | | |
| OR | Cost per person = $R34\,200 \div 152 = R225$ | 1M divide by 152
1A cost per person | |
| 1.1.3 | $\%$ Reception costs = $\frac{R66\,450}{R125\,000} \times 100\%$ | 1M correct fraction
1CA percentage | L1 |
| \(= 53,16\%\) | \(\checkmark\) | | |
| 1.1.4 | Flowers and decor = $1,8\% \times R125\,000 = R2\,250$ | 1M percentage
1A amount | L1 |

Answer only full marks
<table>
<thead>
<tr>
<th>Ques</th>
<th>Solution</th>
<th>Explanation</th>
<th>Level</th>
</tr>
</thead>
</table>
| 1.1.5 | Rand value = GHS 30 000 ÷ 0,32253 ✓M  
≈ R93 014,60 ✓A  
Shortfall = R125 000 − R93 014,60 ✓M  
= R31 985,40 ✓CA  
**OR**  
Cedi value = R125 000 × 0,32253 ✓MA  
= GHS 40316,25  
Shortfall = GHS 40 316,25 − GHS 30 000 ✓M  
= GHS 10 316,25 ✓A  
Rand value = GHS 10 316,25 ÷ 0,32253 
= R31 985,40 ✓CA | 1M divide  
1A correct rounding  
1M subtraction  
1CA amount  
**OR**  
1MA multiply  
1M subtraction  
1A shortfall amount  
1CA amount | L2 |
| 1.1.6 | \( \frac{14}{100} \times R1 349 = R188,86 \) ✓A  
Cost including VAT = R1 349 + R188,86 
= R1 537,86 ✓A  
Selling price in cedi = R1 537,86 × 0,32253 ✓M  
≈ 496 ✓CA  
**OR**  
VAT inclusive cost = R1 349 × 1,14 ✓M  
= R1 537,86 ✓A  
Selling price in cedi = 1 537,86 × 0,32253 ✓M  
≈ 496 ✓CA  
**OR**  
Price in cedi = 1 349 × 0,32253 ✓M  
= 435,09 ✓A  
Selling price including VAT in cedi  
= 435,09329 × 1,14 ✓A ✓M  
≈ 496 ✓CA | 1A multiply by 14%  
1M adding amount  
1A amount with VAT  
1M multiply by 0,32253  
1CA value to nearest cedi  
**OR**  
1A working with 14%  
1M multiply by 1,14  
1A amount with VAT  
1M multiply by 0,32253  
1CA value to nearest cedi  
**OR**  
1M multiply by 0,32253  
1A cedi price  
1A working with 14%  
1M multiply by 1,14  
1CA value to nearest cedi  
**Answer only full marks** | L1 |
<table>
<thead>
<tr>
<th>Ques</th>
<th>Solution</th>
<th>Explanation</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1.7</td>
<td>✓A ✓J</td>
<td>1A wedding expense 1J explanation</td>
<td>L1 L2</td>
</tr>
</tbody>
</table>
| | • Photographer (video) to create memories of the wedding day  
| | • Wedding attire – usually special wedding attire are required  
| | • Wedding contract to pay for the lawyer’s fees for drawing up the contract  
| | • Gifts as a token for members who serve  
| | • DJ to provide for the music at the reception  
| *(accept any valid wedding expense with an explanation)* | | |
| 1.2.1 | Employee works and receives money for the work done ✓D  
| | Employer is a person or institution that hires workers and pays wages/salary for work done ✓D | 1D employee | L1 |
| 1.2.2 | Unemployment Insurance Fund ✓ ✓D | 2D expanding | L1 |
| 1.2.3 | R15 521 ✓ ✓A | 2A amount | L1 |
| 1.2.4 | ✓A | 1A correct statement 1E reason | L1 |
| | No amount allocated ✓E | | |
| 1.2.5 | Monthly tax credit = R2 760 ÷ 12 ✓ MA  
| | = R230 ✓ CA | 1MA divide correct value by 12 1CA monthly tax credit | L1 |
| | Answer only full marks | | |
| 1.2.6 | A = R13 909 + R20 013 + R8 640 ✓ M  
<p>| | = R42 562 ✓ CA | 1M correct values 1CA total deductions | L1 |
| | Answer only full marks | | |</p>
<table>
<thead>
<tr>
<th>Ques</th>
<th>Solution</th>
<th>Explanation</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.2.7</td>
<td>Gross non-retirement funding income</td>
<td>1M using the correct values/codes/words</td>
<td>L1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1A addition</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>OR</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Adding the amounts with source codes 3605, 3713 and 3810</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>OR</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Adding the annual payment</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>other allowances and medical aid contributions</td>
<td></td>
</tr>
<tr>
<td>1.2.8</td>
<td>Remaining monthly contributions</td>
<td>1A R13 909</td>
<td>L2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1CA subtracting</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>R4 975,25</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1M dividing the remaining amount</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1A by 7</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1CA pension per month (only if division by 4,5,6,7)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Answer only full marks</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>[38]</td>
<td></td>
</tr>
</tbody>
</table>
**QUESTION 2 [31]**

<table>
<thead>
<tr>
<th>Ques</th>
<th>Solution</th>
<th>Explanation</th>
<th>Level</th>
</tr>
</thead>
</table>
| 2.1.1 | Total area of a rectangular piece = $30 \text{ cm} \times 12 \text{ cm}$  
$= 360 \text{ cm}^2 \checkmark \text{ SF}$  
Off-cut piece = $360 \text{ cm}^2 - 355,25 \text{ cm}^2$  
$= 4,75 \text{ cm}^2 \checkmark \text{ CA}$  
Total off-cut piece for both sides = $4,75 \text{ cm}^2 \times 2 \checkmark \text{ M}$  
$= 9,5 \text{ cm}^2 \checkmark \text{ CA}$  
**OR**  
Total area of 2 rectangular pieces = $2 \times 30 \text{ cm} \times 12 \text{ cm}$  
$= 720 \text{ cm}^2 \checkmark \text{ A}$  
Area of both sides of stocking = $355,25 \text{ cm}^2 \times 2 \checkmark \text{ M}$  
$= 710,5 \text{ cm}^2$  
Total off-cut piece = $720 \text{ cm}^2 - 710,5 \text{ cm}^2$  
$= 9,5 \text{ cm}^2 \checkmark \text{ CA}$  
**OR**  
Total off-cut area  
$= (2 \times 30 \text{ cm} \times 12 \text{ cm}) - (355,25 \text{ cm}^2 \times 2)$  
$= 720 \text{ cm}^2 - 710,5 \text{ cm}^2$  
$= 9,5 \text{ cm}^2 \checkmark \text{ CA}$ | 1SF substitution  
1A simplifying  
1M subtraction  
1CA area of off-cut  
1M multiply by 2  
1CA area of off-cut  
1SF substitution  
1M multiply by 2  
1A simplifying  
1M multiply by 2  
1M subtraction  
1CA area of off-cut  
1SF substitution  
1M multiply by 2  
1M multiply by 2  
1A simplifying  
1M subtraction  
1CA area of off-cut | L3 |

*Answer only full marks*
<table>
<thead>
<tr>
<th>Ques</th>
<th>Solution</th>
<th>Explanation</th>
<th>Level</th>
</tr>
</thead>
</table>
| 2.1.2  | **Area of a triangle** $= \left(\frac{1}{2} \times 3 \times 5\right)$ cm² $\checkmark$ SF  \[ \checkmark A \]  
Area of 6 triangles $= 7,5$ cm² $\times$ 6 $\checkmark$ M $\checkmark$ CA  
**OR**  
Area of triangles $= \left(\frac{1}{2} \times 3 \times 5\right)$ cm² $\times$ 6 $\checkmark$ M $\checkmark$ A $\checkmark$ CA $\checkmark$ M multiply by 6  
$= 7,5$ cm² $\times$ 6 $\checkmark$ CA $\checkmark$ CA $\checkmark$ MA $\checkmark$ C $\checkmark$ CA | 1 SF substitution  
1A simplifying  
1M multiply by 6  
1CA total area  
**OR**  
1 SF substitution  
1M multiply by 6  
1A simplifying  
1CA total area  | L2 |
| 2.1.3  | **Time taken** $= 9 \times 18$ minutes  
$= 162$ minutes $\checkmark$ MA  
$= 2$ h $42$ min OR $2,7$ h $\checkmark$ C  
**Finishing time** $= 08:25 + 2h42$ $\checkmark$ M  
$= 11:07$ $\checkmark$ CA | 1MA time in minutes  
1C converting time  
1M adding  
1CA finishing time  
correct notation  | L2 |
## 2.2

Number of reels along length = \( \frac{195 \text{ mm}}{23 \text{ mm}} \)
\[ = 8.4782... \]
\[ \approx 8 \] R

Number of reels along breadth = \( \frac{120 \text{ mm}}{23 \text{ mm}} \)
\[ = 5.2173... \]
\[ \approx 5 \] R

Total = \( 5 \times 8 = 40 \) CA

### Explanation
1M dividing length by diameter
1A diameter
1R number rounded down
1R number rounded down
1CA total number

Full marks for
Total = \( 5 \times 8 = 40 \)

Max of 2 marks if divided by circle’s area
Max of 3 marks if divided by square area
1 mark for area of rectangle only

### Level
L2

## 2.3.1

Painted surface area of the lid
\( A \)  
\[ = 3.142 \times 3.6 \text{ cm} (3.6 + 2 \times 0.9) \text{ cm} \]  
\[ \approx 61 \text{ cm}^2 \] CA

OR

Painted surface area of the lid
\( A \)  
\[ = 3.142 \times 36 \text{ mm} (36 + 2 \times 9) \text{ mm} \]  
\[ = 6108.05 \text{ mm}^2 \] CA  
\[ \approx 61 \text{ cm}^2 \] CA

### Explanation
1A radius
1SF substitution
1C conversion
1CA surface area to nearest cm²

Max of 3 marks if inner radius used
Max of 2 marks if units are mixed

### Level
L2
### Question 2.3.2

**Solution:**

Capacity = \( 75\% \times 250 \, \text{mℓ} \)

\[ 187.5 \, \text{mℓ} \]

Volume = \( 187.5 \, \text{cm}^3 \)

Height of the water in the jar

\[
= \frac{\text{Volume of the water (in cm}^3)}{\pi \times \text{radius}^2}
\]

\[ = \frac{187.5 \, \text{cm}^3}{3,142 \times (3.25 \, \text{cm})^2} \]

\[ = 7,532 \ldots \, \text{cm} \]

\[ \approx 6 \, \text{cm} \]

**OR**

\[
= \frac{\text{Volume of the water (in cm}^3)}{\pi \times \text{radius}^2}
\]

\[ = \frac{250 \, \text{cm}^3}{3,142 \times (3.25 \, \text{cm})^2} \]

\[ = 7,532 \ldots \, \text{cm} \]

\[ \approx 6 \, \text{cm} \]

**Explanation:**

1M multiply by \( 75\% \)

1CA capacity in mℓ

2SF substitution

1CA simplification

1R nearest cm

**Answer only full marks**

### Question 2.3.3

\[
2 \times \frac{1}{16} = \frac{2}{16} = \frac{1}{8} \]

**Explanation:**

1M multiply by 2

1A fraction

Accept \( \frac{2}{16} \)

**Answer only full marks**

[31]
### QUESTION 3 [24]

<table>
<thead>
<tr>
<th>Ques</th>
<th>Solution</th>
<th>Explanation</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1.1</td>
<td>Exit 3 ✓✓RD</td>
<td>2RD reading from plan</td>
<td>L1</td>
</tr>
<tr>
<td>3.1.2</td>
<td>✓A ✓J</td>
<td>No, there is no power outlet available in that seat</td>
<td>L1</td>
</tr>
<tr>
<td>3.1.3</td>
<td>✓RD C 109 ✓RD</td>
<td>1RD correct row 1RD correct seat number</td>
<td>L2</td>
</tr>
<tr>
<td>3.1.4</td>
<td>Total seats = seats one side + seats in middle + seats other side</td>
<td>Total seats calculation</td>
<td>L1</td>
</tr>
<tr>
<td></td>
<td>= (3+2×6+3×7+6×8+5)+(8+13+11×14+6) + (3+5+6+3×7+5×8)</td>
<td>Correct number of seats in each section</td>
<td></td>
</tr>
<tr>
<td></td>
<td>✓MA ✓MA ✓MA</td>
<td>Correct calculation of total seats</td>
<td></td>
</tr>
<tr>
<td></td>
<td>= 89 + 181 + 75</td>
<td>1CA total seats</td>
<td></td>
</tr>
<tr>
<td></td>
<td>= 345 ✓CA</td>
<td>3MA adding correct number of seats in each section</td>
<td></td>
</tr>
<tr>
<td>3.1.5</td>
<td>104 and 110 ✓✓RD</td>
<td>2RD seat numbers</td>
<td>L1</td>
</tr>
<tr>
<td>3.1.6</td>
<td>Number of seats with access to a power supply = 52 ✓A</td>
<td>1A counting seat 1CA numerator 1CA writing as a denominator from 3.1.4</td>
<td>L2</td>
</tr>
<tr>
<td></td>
<td>Probability = $\frac{52}{345}$ ✓CA</td>
<td>27 OR 9 345 OR 18 115 OR 54 OR 115 Max 2</td>
<td></td>
</tr>
<tr>
<td>3.2.1</td>
<td>14 times ✓✓RD [Free State 15 times]</td>
<td>2RD reading from map If 13 one mark</td>
<td>L1</td>
</tr>
<tr>
<td>Ques</td>
<td>Solution</td>
<td>Explanation</td>
<td>Level</td>
</tr>
<tr>
<td>------</td>
<td>----------</td>
<td>-------------</td>
<td>-------</td>
</tr>
</tbody>
</table>
| 3.2.2 | Distance = 94,7 km – 76 km ✓MA  
= 18,7 km ✓A | 1MA subtracting from 94,7  
1A distance  
Answer only full marks | L1 |
| 3.2.3 | Blue Hills ✓RD | 2RD reading from map (2) | L1 |
| 3.2.4 | ✓RD ✓RD  
WP 4, WP 5, WP 6 ✓RD  
OR  
WP3 to WP4 , WP 4 to WP5 , WP5 to WP6 ✓✓RD | 3RD reading from map  
OR  
3RD reading from map  
2 marks for W4 to W6 | L1 |

[24]
### QUESTION 4 [30]

<table>
<thead>
<tr>
<th>Ques</th>
<th>Solution</th>
<th>Explanation</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1.1</td>
<td>The data for the global regions is qualitative. <strong>✓ ✓ J</strong> OR The global regions cannot be expressed as numerical data <strong>✓ ✓ J</strong></td>
<td>2J explanation OR 2J explanation</td>
<td>L1</td>
</tr>
<tr>
<td>4.1.2</td>
<td>5% <strong>✓ ✓ RT</strong> and 8% <strong>✓ ✓ RT</strong></td>
<td>3RT Correct modal %</td>
<td>L1</td>
</tr>
<tr>
<td>4.1.3</td>
<td>Median = [ \frac{7 + 8}{2} % ] <strong>✓ ✓ M</strong> = 7,5% <strong>✓ ✓ CA</strong></td>
<td>2M for adding correct values and dividing by 2 1CA answer</td>
<td>L2</td>
</tr>
<tr>
<td>4.1.4</td>
<td>Total usage = 3% + 8% + 11% = 22% <strong>✓ ✓ CA</strong></td>
<td>1RT correct values 1CA total</td>
<td>L1</td>
</tr>
<tr>
<td>4.1.5</td>
<td>2% + 9% + 23% + 22% = 56% <strong>✓ ✓ CA</strong> Note: Candidates that add the 4% of the Middle East is also correct.</td>
<td>2M Adding all correct values. 1CA total</td>
<td>L1</td>
</tr>
<tr>
<td>4.1.6</td>
<td>16% <strong>✓ ✓ RG</strong></td>
<td>2RG correct value</td>
<td>L1</td>
</tr>
</tbody>
</table>

Answer only full marks, Two marks for first correct answer, one mark for second correct answer, Answer only 60% full marks.
### Ques 4.1.6 (b)

#### Solution

1A mark for every TWO points plotted correctly

(Penalty of one mark if points are not joined)

<table>
<thead>
<tr>
<th>Ques</th>
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<th>Explanation</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1.6</td>
<td>(b)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Explanation

**WORLD POPULATION AND MEANS OF COMMUNICATION PERCENTAGES PER GLOBAL REGION**

- Percentage world population
- Percentage Internet communication
- Percentage cell phone communication

1A mark for every TWO points plotted correctly

(Penalty of one mark if points are not joined)

*Level: L2*
<table>
<thead>
<tr>
<th>Ques</th>
<th>Solution</th>
<th>Explanation</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1.7</td>
<td>South Asia OR 1 ✓ ✓ RD</td>
<td>2RD reading from graph or table</td>
<td>L1</td>
</tr>
<tr>
<td>4.2.1</td>
<td>Rural Number = 7 095 476 818 × 48% ✓ A</td>
<td>1MA multiplying with %</td>
<td>L1</td>
</tr>
<tr>
<td></td>
<td>OR</td>
<td>OR</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Urban number = 7 095 476 818 × 52% ✓ A</td>
<td>1MA multiplying with %</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rural = 7 095 476 818 – 3 689 647 945 ✓ A</td>
<td>1A persons</td>
<td></td>
</tr>
<tr>
<td></td>
<td>= 3 405 828 873 ✓ A</td>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>4.2.2</td>
<td>Social networking users</td>
<td>1SF dividing the correct value by 7 095 476 818</td>
<td>L1</td>
</tr>
<tr>
<td></td>
<td>= ( \frac{1 856 680 860}{7 095 476 818} \times 100% ) ✓ SF</td>
<td>1CA answer in %</td>
<td></td>
</tr>
<tr>
<td></td>
<td>= 26,167…% ✓ CA</td>
<td>Answer only full marks</td>
<td></td>
</tr>
<tr>
<td>4.2.3</td>
<td>6 572 950 124 ✓ ✓ A</td>
<td>2A for correct digits</td>
<td>L1</td>
</tr>
</tbody>
</table>

**[30]**
### QUESTION 5[27]

<table>
<thead>
<tr>
<th>Ques</th>
<th>Solution</th>
<th>Explanation</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.1.1</td>
<td>M = 2 925 + 1 970 + 1 963 + 1 568 + 1 700 + 1 817 + 1 342 + 2 118 = 15 403</td>
<td>1MA adding all values 1CA value of M</td>
<td>F L1</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Answer only full marks</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Full marks for 15 404</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Penalty of one if given as 1 000’s</strong></td>
<td></td>
</tr>
<tr>
<td>5.1.2</td>
<td>Value for both N = 12 898 – (2 394 + 1 302 + 1 405 + 1 490 + 1 311 + R1 756) = 3 240</td>
<td>1M subtracting from total 1CA cost for both 1M dividing by 2 1CA amount</td>
<td>F L2</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>OR</strong> 1A for R1 970 1M for subtracting R349 1M for subtracting R1 1CA total Sibiya</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>OR</strong> 1A for R1 963 1M for subtracting R342 1M for subtracting R1 1CA total Magome</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Answer only full marks</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Penalty of one if given as 1 000’s</strong></td>
<td></td>
</tr>
<tr>
<td>5.1.3</td>
<td>Range = R2 925 000 – R 1 342 000 = R1 583 000</td>
<td>1M concept of range 1CA range</td>
<td>D L2</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Answer only full marks</strong></td>
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<td></td>
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<td><strong>Penalty of one if not given as 1 000’s</strong></td>
<td></td>
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<tr>
<td>5.1.4</td>
<td>Songelwa : Magome = 30 : 342 = 5 : 57 1 : 11,4</td>
<td>1A correct values 1CA form</td>
<td>F L1</td>
</tr>
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<td></td>
<td></td>
<td><strong>NP - rounding</strong></td>
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</tbody>
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<table>
<thead>
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<th>Ques</th>
<th>Solution</th>
<th>Explanation</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.1.5</td>
<td>Sibiya: Increase = R1 970 000 – R1 872 000 √M = R98 000</td>
<td>Phillips: Increase = R1 700 000 – R1 625 000 = R75 000 √M Mabilane: Increase = R2 118 000 – R2 032 000 = R86 000 √M Magome: Increase = R1 963 000 – R1 861 000 = R102 000 √A Magome received the greatest increase √√CA</td>
<td>F L2</td>
</tr>
<tr>
<td>5.1.6</td>
<td>Mabunda MD √√A</td>
<td>2M subtracting any two of Sibiya, Phillips, Mabilane</td>
<td>D L1</td>
</tr>
<tr>
<td>5.2.1</td>
<td>100% √√A</td>
<td>2A correct % Accept 100</td>
<td>P L1</td>
</tr>
<tr>
<td>5.2.2</td>
<td>P = 14 √A 18 √A = 7 9 √CA OR P = 1 – 4 18 √A = 7 9 √CA</td>
<td>1A numerator 1A denominator 1CA simplification OR 1M subtracting from 1 1A denominator 1CA simplification</td>
<td>P L2</td>
</tr>
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(5) Full marks if only Magome was calculated correctly with conclusion

(2) Penalty one mark if an extra name is added

(3) Answer only full marks

(4)
<table>
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<tr>
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<th>Level</th>
</tr>
</thead>
</table>
| 5.3   | Growth 1st year = $4\,705\,306 \times 5\%$  
       $\approx 235\,265$  
       Total after the 1st year = $4\,705\,306 + 235\,265$  
       $= 4\,940\,571$  
       Growth 2nd year = $4\,940\,571 \times 5.9\%$  
       $= 291\,493$ OR $291\,494$  
       Total after 2nd year = $4\,940\,571 + 291\,493$  
       $= 5\,232\,064$ OR $5\,232\,065$  
       OR  
       $100\% + 5\% = 105\%$  
       Total after 1st year = $4\,705\,306 \times 105\%$  
       $= 4\,940\,571.3$  
       $100\% + 5.9\% = 105.9\%$  
       Total after 2nd year = $4\,940\,571.3 \times 105.9\%$  
       $= 5\,232\,065.007$  
       $\approx 5\,232\,065$  
       OR  
       $= 4\,705\,306 \times 105\% \times 105.9\%$  
       $= 5\,232\,065.007$  
       $\approx 5\,232\,065$  
       Answer only full marks |  
|       | 1A calculating 5%  
       1M adding  
       1CA first year total  
       1CA calculating 5.9% of total  
       1CA 2nd year total  
       1A increasing with 5%  
       1M percentage calculation  
       1CA first year total  
       1CA increasing with 5.9%  
       1CA 2nd year total, rounded  
       1M percentage calculation  
       1A increasing by 105%  
       1M percentage calculation  
       1A increasing by 105.9%  
       1CA 2nd year total, rounded | D  
|       | L3 |