## MENTAL PAPER

(1 mark each c.a.o.)

| 1. | 356 or three hundred and fifty six | 2. | 4 tenths |
| :---: | :--- | :---: | :--- |
| 3. | sphere (ignore incorrect spelling) | 4. | 12,501 or 12501 or 12501 or twelve <br> thousand five hundred and one |
| 5. | 7 or seven |  |  |
| 6. | 13 or thirteen | 7. | 33 or thirty three |
| 8. | 7 or seven | 9. | 6 or six (or any other correct common <br> multiple) |
| 10. | 750 ml or 750 millilitres or seven <br> hundred fifty millilitres | 11. | 53 or fifty three |
| 12. | 900 or nine hundred | 13. | Any number in digits or in words between <br> twelve thousand and thirteen thousand. |
| 14. | $0 \cdot 3$ | 15. | 36 or thirty six |
|  |  |  |  |
| 16. | 16 or sixteen | 17. | $12 \frac{1}{4}$ |
| 18. | 40 or forty | 19. | Runner B |
| 20. | 40 or forty |  |  |
|  |  |  |  |

## WRITTEN PAPER

| Question No. | Answers and Requirements | Marks | Additional Guidance |
| :---: | :---: | :---: | :---: |
| 1. a) | 69 | 1 | c.a.o. |
| b) | 836 | 1 | c.a.o. |
| c) | 1600 | 1 | c.a.o. |
| d) | 105 | 1 | c.a.o. |
| 2. a) | 16 | 1 | c.a.o. |
| b) | 100 | 1 | c.a.o. |
| c) | 16 | 1 | c.a.o. |
| d) | 954 | 1 | c.a.o. |
| 3. a) | 48,291 | 1 | c.a.o. |
| b) | $43 \cdot 5$ | 1 | c.a.o. |
| c) | any two numbers that give an odd total | 1 | c.a.o. |
| d) | $99+356+3901$ | 1 | c.a.o. (Accept in any order) |
| 4. | $2 \times 4 \cdot 5$ seen or implied $9 \mathrm{~m}^{2}$ <br> $9 \times 15$ seen or implied $€ 135$ | $\begin{aligned} & \hline \hline 1 \\ & 1 \\ & 1 \\ & 1 \\ & \hline \end{aligned}$ | Accept other valid methods <br> (f.t. from area of carpet) |
| 5. a) | cube (12 edges, 8 vertices) cylinder (3 faces, 0 vertices) cone (2 faces, 1 edges) | $\begin{aligned} & \hline \hline 1 \\ & 1 \\ & 1 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { c.a.o. } \\ & \text { c.a.o. } \\ & \text { c.a.o. } \end{aligned}$ |
| b) |  | 2 | c.a.o. |
| 6. a) i. | $0 \cdot 6$ | 2 | c.a.o. (Accept answer as fraction) |
| a) ii. | 0.25 marked correctly | 1 | c.a.o. |
| b) | $20 \%, 0 \cdot 6, \frac{3}{4}$ | $\begin{aligned} & 1 \\ & 1 \end{aligned}$ | $20 \%$ is identified as the smallest $0 \cdot 6, \frac{3}{4}$ in their correct order |
| 7. a) | $1.4 \times 8$ seen or implied $€ 11 \cdot 20$ | $\begin{aligned} & 1 \\ & 1 \\ & \hline \end{aligned}$ | Accept other valid methods |
| b) | $1.6 \times 12$ seen or implied $€ 19 \cdot 20$ | $\begin{aligned} & 1 \\ & 1 \\ & \hline \end{aligned}$ | Accept other valid methods |
| c) | 8 bottles | 1 | c.a.o. |


| Question No. | Answers and Requirements | Marks | Additional Guida |
| :---: | :---: | :---: | :---: |
| 8. a) i. | $120^{\circ}$ | 1 | c.a.o. |
| a) ii. | $77^{\circ}$ | 1 | c.a.o. |
| b) i. | obtuse | 1 | c.a.o. |
| b) ii. | $180^{\circ}$ | 1 | c.a.o. |
| b)iii. | NW | 1 | c.a.o. |
| 9. a) i. | $\begin{aligned} & \hline 268 \\ & 52 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 1 \\ & 1 \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { c.a.o. } \\ & \text { c.a.o. follow through (f.t.) } \end{aligned}$ |
| a) ii. | $\begin{aligned} & \hline 56 \\ & 3920 \\ & \hline \end{aligned}$ | $1$ | $\begin{aligned} & \text { c.a.o. } \\ & \text { c.a.o. follow through (f.t.) } \end{aligned}$ |
| b) | 16-36-49 | 1 | c.a.o. |
| 10. a) | 1050 ml seen or implied 450 ml | $\begin{aligned} & \hline 1 \\ & 1 \\ & \hline \end{aligned}$ | Accept other valid methods |
| b) | subtraction or division seen or implied <br> 3 glasses | $1$ | f.t. from 10a |
| c) | 90 ml | 1 | f.t. from 10b |
| 11. a) | 90 passengers | 1 | c.a.o. |
| b) | 36 passengers | 1 | c.a.o. |
| c) | 90 passengers | 1 | c.a.o |
| d) | $\frac{90}{360} \text { or } \frac{1}{4}$ | $\begin{aligned} & 1 \\ & 1 \end{aligned}$ | Correct denominator seen c.a.o. (Accept other equivalent fractions) |
| 12. a) | 15 m | 1 | c.a.o. |
| b) | $\begin{aligned} & 7 \cdot 2 \mathrm{~m}^{2} \\ & 14 \cdot 4 \mathrm{~m}^{2} \end{aligned}$ | $1$ | Accept other valid methods c.a.o. |
| c) | subtraction seen or implied $32 \cdot 1 \mathrm{~m}^{2}$ | $\begin{aligned} & 1 \\ & 1 \end{aligned}$ | Accept other valid methods c.a.o. (f.t. from 12b) |
| 13. a) | $\text { Cardigan - Shop A - } 5$ $\text { Dresses - Shop B - } 9$ | 1 | c.a.o. (both correct) |
| b) | Correct completion of bar charts | 1 | c.a.o. (both correct) |
| c) i. | Yes | 1 | c.a.o. |
| c) ii. | Shop A - 56 items Shop B - 49 items | 1 | Accept any valid reasoning |
| d) | $\begin{aligned} & \frac{30}{105} \text { or } \frac{6}{21} \\ & \frac{2}{7} \end{aligned}$ | 1 <br> 1 | c.a.o |


| Question No. | Answers and Requirements | Marks | Additional Guidance |
| :--- | :--- | :---: | :--- |
|  |  |  |  |
| 14. | a) | 95 g | 1 |
|  | c.a.o. |  |  |
| b) | 19 g | 1 | c.a.o. |
| c) | $21 \times 7=147 \mathrm{~g}$ seen or implied | 1 | Accept any other valid method |
|  | 52 g | 1 | c.a.o. |

## Legend to Marking Scheme:

c.a.o. correct answer only
f.t. follow through

## Other guidelines:

1. No mark in the marking scheme is sub-divisible.
2. A correct answer scores full marks, even if no working is shown.
3. Incorrect answers - even though nearly correct - score no marks but marks are awarded for correct working.
4. No marks are awarded when a wrong method leads to a correct answer.
5. Incorrect working or statement following a correct answer is ignored.
6. An answer or working that is crossed out and not replaced, is marked as if it was not crossed out. If the answer or working is replaced, then the crossed out answer or working should not be considered in your marking.
7. If a correct answer is copied incorrectly from the working area to the answer area, then the marks are awarded fully.
8. In the case of misreading, f.t. may be applied and only the final accuracy mark is lost. The method marks may still be earned provided that the misreading doesn't oversimplify the question.
