## MATHEMATICS MARKING SCHEME

## MENTAL PAPER

(1 mark each c.a.o.)

| 1. | 9,436 or 9436 or 9436 | 2. | 56 or fifty six |
| :---: | :--- | :--- | :--- |
| 3. | 180 or one hundred and eighty | 4. | 4 or four |
| 5. | 9 or $9 \cdot 0$ or nine or nine point zero |  |  |
|  |  |  |  |
| 6. | 30 or thirty | 7. | 3,200 or 3200 or 3200 or three thousand <br> two hundred |
| 8. | 22 or twenty two | 9. | 25 or twenty five |
| 10. | 3,500 or 3500 or 3500 or three <br> thousand five hundred | 11. | 10 or ten |
| 12. | 92 or ninety two | 15. | 5 or five |
| 14. | 36 or thirty six |  |  |
|  |  | 17. | 27 or twenty seven |
| 16. | 200 or 190 or 220 or two hundred <br> or one hundred ninety or two hundred <br> twenty | SW or South West |  |
| 18. | $2-10$ or two - ten |  |  |
| 20. | $39 \cdot 96$ or thirty nine euro and ninety <br> six cent |  |  |
|  |  |  |  |

## WRITTEN PAPER

| Question No. | Answers and Requirements | Marks | Additional Guidanc |
| :---: | :---: | :---: | :---: |
| 1. a) | 400 | 1 | c.a.o. |
| b) | 2875 | 1 | c.a.o. |
| c) | 4900 | 1 | c.a.o. |
| d) | 653 | 1 | c.a.o. |
| 2. a) i | 200 g | 1 | c.a.o. |
| a) ii | 5 ml | 1 | c.a.o. |
| a)iii | 17 cm | 1 | c.a.o. |
| b) | 14 cm | 1 | c.a.o. |
| 3. a) | square numbers | 1 | c.a.o. (ignore any spelling mistakes) |
| b) | mixed fractions | 1 | c.a.o. (ignore any spelling mistakes) |
| c) | multiples of 5 | 1 | c.a.o. (ignore any spelling mistakes) |
| d) | even numbers | 1 | c.a.o. (ignore any spelling mistakes) |
| 4. a) | $\frac{10}{25} \text { or } \frac{2}{5}$ <br> or any other equivalent fraction | 1 | c.a.o. |
| b) | $\frac{3}{5}$ | 1 | c.a.o. |
| c) | $\begin{aligned} & \frac{2}{5} \text { of } 100 \text { seen or implied } \\ & 40 \% \end{aligned}$ |  | Accept other valid methods <br> (f.t. from 4a) |
| 5. a) i | $64 \div 8=8$ | 1 | c.a.o. |
| a) ii | $42 \times 6 \times 3$ | 2 | c.a.o. |
| b) | $27 \div 3=9 \text { or } 9 \times 3=27$ <br> or 9 is one third of 27 <br> Note: one third of 27=9 (1 mark) | 2 | Accept other valid reasoning |
| 6. a) | 1234 | 1 | c.a.o. |
| b) | $\frac{1}{5}=0.2 \quad \text { or } \quad \frac{1}{2}=0.5$ <br> Accept $\frac{1}{5}=0.20$ and $\frac{1}{2}=0.50$ | 2 | c.a.o. |
| c) | $63 \times 72$ | 2 | c.a.o. |
| 7. a) | $90 \%$ | 1 | c.a.o. |
| b) | $50 \%$ of 20 seen or implied 10 | $\begin{aligned} & 1 \\ & 1 \\ & \hline \end{aligned}$ | Accept other valid methods |
| c) |  | $\begin{aligned} & 1 \\ & 1 \end{aligned}$ | for CAT bar for FISH bar (f.t. from 7b) |


| Question No. | Answers and Requirements | Marks | Additional Guidance |
| :---: | :---: | :---: | :---: |
| 8. a) | 3 kg 470 g | 1 | c.a.o. |
| b) | Subt. seen or implied $1 \mathrm{~kg} 30 \mathrm{~g}$ | $1$ | Accept other valid methods (f.t. from 8a) |
| c) | Subt. seen or implied 250 g | $1$ | Accept other valid methods |
| 9. a) | 17 | 2 | c.a.o. |
| b) | 12 | 2 | c.a.o. |
| c) | 2 | 1 | c.a.o. |
| 10. a) | $€ 15 \div 6$ seen or implied $€ 2.50$ | $\begin{aligned} & \hline 1 \\ & 1 \\ & \hline \end{aligned}$ | Accept other valid methods |
| b) | Addition / Mult. seen or implied $€ 27 \cdot 50$ | $1$ | $\begin{aligned} & \hline \text { c.a.o. } \\ & \text { (f.t. from 10a) } \end{aligned}$ |
| c) | 8 e-books | 1 |  |
| 11. a) i. | Example |  |  |
| a) ii. | Correct drawing of any right angled triangle on board | 1 | c.a.o. |
| a)iii. | Correct drawing of any scalene triangle on board | 1 | c.a.o. |
| b) | $\begin{aligned} & 180^{\circ}-90^{\circ}(\text { seen or implied }) \\ & \text { Angle } \mathrm{a}=45^{\circ} \end{aligned}$ | $1$ | Accept other valid methods |
| c) | The correct angle ticked (the 2nd) | 1 | c.a.o. |
| 12. a) | $22 \times 15$ mult. seen or implied $330 \mathrm{~cm}^{2}$ | $1$ | Accept other valid methods |
| b) i. | $3 \mathrm{~cm} \times 3 \mathrm{~cm}=9 \mathrm{~cm}^{2}$ | 1 | c.a.o. |
| b) ii. | $54 \mathrm{~cm}^{2}$ | 1 | c.a.o. |
| c) | $276 \mathrm{~cm}^{2}$ | 1 | c.a.o. |


| Question No. | Answers and Requirements | Marks | Additional Guida |
| :---: | :---: | :---: | :---: |
| 13. a) | 60 mm | 1 | c.a.o. |
| b) | 95-10 seen or implied 85 mm | $1$ | c.a.o. |
| c) | 230 mm | 1 | c.a.o. |
| d) | 231 mm seen or implied 1 mm | $\begin{aligned} & 1 \\ & 1 \\ & \hline \end{aligned}$ | Accept other valid methods |
| 14. a) | Subt. / Division seen or implied 10 glasses | $\begin{aligned} & \hline 1 \\ & 1 \\ & \hline \end{aligned}$ | Accept any other valid reasoning |
| b) i | No | 1 | c.a.o. |
| b) ii | 60 glasses can be filled | 1 | Accept any other valid reasoning |
| c) | $150 \mathrm{ml} \times 400$ seen or implied 60 litres | $\begin{aligned} & 1 \\ & 1 \\ & \hline \end{aligned}$ | Accept any other valid method |
| 15. a) | Time marked correctly on clock | 2 | c.a.o. |
| b) | Use of timeline / Addition seen or implied 75 minutes | 1 <br> 1 | Accept other valid methods |
| c) | Use of timeline / Addition seen or implied 4:30 p.m. | $\begin{aligned} & 1 \\ & 1 \\ & \hline \end{aligned}$ | Accept other valid methods |
| 16. | Any valid attempt multiples of 10 seen $\mathrm{A}=70 ; \mathrm{B}=20 ; \mathrm{C}=40$ | $\begin{gathered} \hline 1,1 \\ 1 \\ 1,1,1 \end{gathered}$ | Accept other valid methods |

## 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. Incorrect working or statement is ignored if followed by a correct answer.
5. 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.
6. If a correct answer is copied incorrectly from the working area to the answer area, then the marks are awarded fully.
7. 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.
