## NATIONAL LEVEL SCIENCE TALENT SEARCH EXAMINATION

## Solutions for Class : 5

## MATHEMATICS

1. (C)
$\frac{3}{4}, 1 \frac{4}{5}, 2 \frac{5}{6}, ?, 4 \frac{7}{8}$

$\therefore$ The missing fraction

$$
\begin{array}{llll}
\left.\begin{array}{lll}
17 & 10 & 27 \\
\hline & 1 & 3 \frac{6}{7}
\end{array}\right]
\end{array}
$$

2. (D) Perimeter of the given figure
$3.8+4.4+2.6+3.8+4.2+6.3+4.6$
$+7.2+4.3+8.2+1.7+3.5+1.4+4.5$
$+3.6+4.2=68.3 \mathrm{~cm}$.
3. (C) Area of rectangle A: Area of rectangle B
$=(8 \times 5) \mathrm{cm}^{2}:(15 \times 4) \mathrm{cm}^{2}$
$=40: 60=2: 3$
4. (A) Area of $\mathrm{X}=\frac{1}{2} \times \mathrm{bh}=\frac{1}{2} \times 4 \times 2=4 \mathrm{~cm}^{2}$

Area of $Y=S^{2}=3 \times 3=9 \mathrm{~cm}^{2}$
Area of rectangle $=1 \times b=(9 \times 4)=$ $36 \mathrm{~cm}^{2}$
$\therefore \quad$ Area of shaded part $=36-(4+9)=36-$ $13=23 \mathrm{~cm}^{2}$.
5. (B) Average time taken by the boys

$=$| 63 | 60 | 66 | 59 | 68 |
| :--- | :--- | :--- | :--- | :--- |

$\frac{316}{5}=63.2$ seconds

## GENERAL SCIENCE

6. (A) The given figure shows the action of pulling out of nail by hammer. It is an example of I order lever.
7. (A) The waterdroplets formed on the leaves of plant on a cold morning is due to condensation of water vapour in air.
8. (B) $X$ in the given figure is lungs. Lungs are
the respiratory and excretory in function.
9. (C) The tortoise, moth and lizard reproduce by laying eggs. Only the lizard crawls. The moth is an insect, so it has six legs, not four.
10. (D) The stone occupies the space in the beaker of water. The amount of space it occupies is called volume.

## CRITICAL THINKING

11. (D)
12. (B)
13. (D)
14. (B)
15. (D)
