

# Marking Scheme of Intra Olympiad

## Maths Class - VI

1 - B	2 - A	3 - C	4 - A	5 - B	6 - A
7 - C	8 - C	9 - B	10 - B	11 - C	12 - D
13 - D	14 - B	15 - B	16 - C	17 - D	18 - D
19 - C	20 - D	21 - C	22 - D	23 - A	24 - D
				25 - D	

Sol. 1. Greatest no. 8305  
 Smallest no. 3085  
 difference  $\underline{\quad 5220 \quad}$

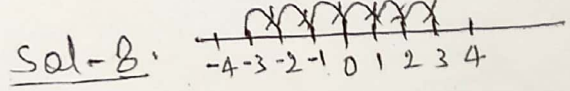
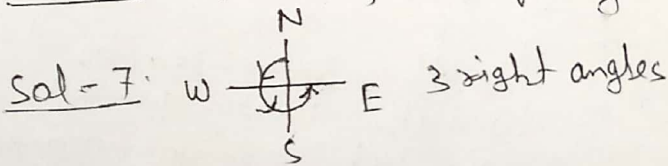
Sol. 2. Maximum height of the box is on Friday

Sol. 3.  $5618 \times 169 - 5618 \times 69$   
 $= 5618 \times (169 - 69)$   
 $= 5618 \times 100 = 561800.$

Sol. 4. Present age = x yrs.  
 age after 5 yrs = x + 5 yrs.

Sol. 5. 1 is a factor of every number.

Sol. 6. Meeting point is vertex.



Sol. 9.  $20 + 9 + \frac{1}{100} = 29.01$

Sol. 10. 1 day = 24 hrs  
 fraction =  $\frac{8}{24} = \frac{1}{3}$

Sol. 11. Nos. of unseen faces are 4, 5, 1 and 6, 2, 3  
 Sum =  $4 + 5 + 1 + 6 + 2 + 3 = 21$

Sol. 12. 
$$\begin{array}{r} \boxed{4} \quad \boxed{2} \\ + \boxed{6} \quad \boxed{3} \\ \hline \boxed{1} \quad \boxed{0} \quad \boxed{5} \end{array}$$

Sol. 13. starting at X, A and R  
 these are 2 possible path from each that can be taken  
 $\therefore$  Total no. of path =  $2 \times 2 \times 2 = 8$

Sol. 14.  $(2+14) \div 2 = 8$   
 $(3+9) \div 2 = 6$   
 $(7+11) \div 2 = 9$

Sol. 15. Total cars =  $1 + 2 + 3 + 4 + 5 + 6 + 7 = 28$

Sol. 16. Let total strength be x  
 boys =  $\frac{2x}{5}$  and girls =  $\frac{3x}{5}$   
 A.T.C  $\frac{3x}{5} - \frac{2x}{5} = 10 \Rightarrow \frac{x}{5} = 10$   
 $x = 50 \therefore$  boys =  $\frac{2}{5} \times 50 = 20$

Sol. 17. Let ratio be x  
 E = 2x, H = 3x, M = 5x  
 A.T.C.  $5x - 3x = 40 \Rightarrow 2x = 40$   
 $\therefore x = 20, M = 5 \times 20 = 100$

Sol-18. 1 to 89 = 9 times

from 90 to 100 = 11 times

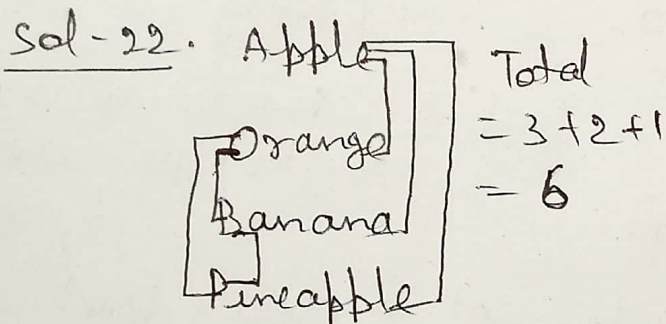
Total = 9 + 11 = 20 times

Sol-20 for 2 =  $1 \times 3 = 3$

for 4 =  $3 \times 5 = 15$

for 6 =  $5 \times 7 = 35$

It's always an odd number.



Sol-24. Let quotient be  $x$

$\therefore$  divisor =  $6x$

$\therefore$  Dividend =  $6 + 6x = 36x$

Dividend = divisor  $\times$  quotient

$$36x = 6x \times 6$$

$$36x = 6x^2$$

$$\frac{36}{6} = \frac{x^2}{x}$$

$$6 = x$$

$\therefore$  Dividend =  $36 \times 6 = 216$ .

Sol-19.  $6 + 7 + 2 + 4 + x$

$$= 19 + x = 19 + 2 = 21$$

$\therefore$  Least least digit = 2

Sol-21 Let total capacity be  $x$  L.

Earlier gauge =  $\frac{x}{4}$

after filling =  $\frac{3x}{4}$

A.T.C  $\Rightarrow \frac{3x}{4} - \frac{x}{4} = 25$

$$\frac{x}{2} = 25 \Rightarrow x = 50 \text{ L}$$

Sol-23 Let breadth be  $x$  m.

$\therefore$  length =  $3x$  m.

$2(l+b) = P.$  of rectangle

$$2(3x+x) = 800$$

$$4x = 400$$

$$x = 100$$

$\therefore$  length =  $3 \times 100 = 300$  m.

breadth =  $1 \times 100 = 100$  m.

$$\text{Area} = l \times b = 300 \times 100 = 30000 \text{ m}^2$$

Sol-25. No. of odd rows

= 1, 3, 5, 7, 9, and 11 = 6 rows

No. of even rows = 2, 4, 6, 8

and 10 = 5 rows

Total No. of seats =  $6 \times 15 + 5 \times 16$

$$= 90 + 80 = 170 \text{ seats}$$