## SATISH CHANDRA MEMORIAL SCHOOL <br> CLASS III

Topic: Number series and coding decoding
MMRWS-8( Answer key and hint )

1. Find the missing number :
$40,2,44,6,48,10, ?, ?$
a) 34,6
b) 52 , 14
c) 52,16

## Ans:


$48+4=52$ and $10+4=14$
2. If $\mathbf{H}=8$ and $\mathrm{HAT}=\mathbf{2 9}$, find how $\mathrm{BOX}=$ ?
a) 42
b) 41
c) 51

Ans: H = 8

$$
H=8, A=1, T=20 \Longrightarrow 8+1+20=29
$$

NOW, $B=2,0=15, X=24 \rightarrow 2+15+24=41$
3. If GARMENT is written as 20269142213, how is INDULGE written in that code?
a) $\mathbf{1 8 1 3 2 3 6 1 5 2 0 2 2}$
b) $\mathbf{4 5 6 7 9 9 0 0} \mathbf{8}$
c) $\mathbf{1 8 1 3 3 2 6 1 5 2 0 2 2}$

Ans . Correct Option: A
In this question we have to count places of alphabets from the end point $Z$.

Suppose $Z=1, Y=2, X=3 \ldots . .$.

Then,

# GARMENT is written as $\boldsymbol{\Rightarrow} \mathbf{2 0}, \mathbf{2 6}, \mathbf{9}, \mathbf{1 4}, \mathbf{2 2}, \mathbf{1 3}, 7$ 

## Similarly,

INDULGE $\Rightarrow$ 18, 13, 23, 6, 15, 20, 22
4. If the letters in PRABA are coded as 27595 and THILAK are coded as 368451, how can BHARATI be coded?
a) 9657538
b) $\mathbf{9 5 6 7 5 6 8}$
c) $\mathbf{7 8 9 0 5 4 3}$

Ans: a)

PRABA
$\downarrow \downarrow \downarrow \downarrow \downarrow$
27595

THILAK
$\downarrow \downarrow \downarrow \downarrow \downarrow \downarrow$
368451

Similarly;

## BHARATI

$\downarrow \downarrow \downarrow \downarrow \downarrow \downarrow \downarrow$
9657538
5. In a certain code COURSE is written as ESRUOC. How can BREATH be written in that code?
a) HTAERB
b) HTBREA
c) HATEBR

Ans. . Correct Option: a)
COURSE = ESRUOC

Letters have been written in reverse order

## Similarly;

BREATH = HTAERB
6. $2,12,36,80,150$, ?
a) 250
b) 252
c) $\mathbf{2 5 4}$

Ans: 252
[ This question is out of syllabus ]
7. $8,7,11,12,14,17,17,22$, ?
a) $\mathbf{2 7}$
b) $\mathbf{2 6}$
c) $\mathbf{2 0}$

Ans. $3^{\text {rd }}$ term $=1^{\text {st }}$ term +3 , and $4^{\text {th }}$ term $=2^{\text {nd }}$ term +5
It's a alternative series .

Ans: $17+3=20$.
8. $2,6,12,20,30,42,56$, ?
a) 72
b) 62
c) 61

Ans: 6 -2 = 4 ,

$$
\begin{aligned}
& 12-6=6 \\
& 20-12=8 \\
& 30-20=10 \\
& 42-30=12 \\
& 56-42=14
\end{aligned}
$$

Therefore, 56 + 16 = 72
9. $20,19,17, ?, 10,5$.
a) 14
b) 16
b) 15

Ans: 20-19 = 1
19-17=2
17-3 = 14
Therefore, 14
10. If green means red, red means yellow, yellow means blue, blue means orange and orange means green, what is the colour of clean sky ?
a) Yellow
b) Red
c) Green

