## FIITJEE

## NTSE-2015-16 (Stage-I) <br> SOLUTIONS <br> MAT

1. Alphabet in decreasing order in series

2. 


3.

4.

5. $\quad 2^{3}-8$
$3^{3}-27$
$4^{3}-64$
$5^{3}-156$
6. $5+6=11$
$11+8=19$
$19+10=29$
$29+12=41$
7. $5^{3}-5=120$
$4^{3}-4=60$
$3^{3}-3=24$
$2^{3}-2=6$
$1^{3}-1=0$
8. $729,81,9,1, \frac{1}{9}, \frac{1}{81}, \frac{1}{729}$
9.

10.

11.

12. 3, all three are different
13. delhi is in India and India is in asia
14. No. 20 is place in all three circle
15. $5+17+14=34$ persons
16. in option 4, letter are in jumbling order
17. Every first No. is a square of $2^{\text {nd }}$ no. but in option $3^{\text {rd }}$ it is not applicable
18. All three things are use on the black board.
19. Shimla is not state
20. $5=6$
$1=2$
$3=4$
21. $1=5$
$2=6$
$3=4$
22. $x=3 \mathrm{~cm}$

Total no. of cubes $=(x)^{3}=(3)^{3}=27$
23.

$1=4$
$2=5$
$6=3$
24.

25. Add (+2) in every next letter

CHILDREN = EJKNFTGP


TEACHER = VGCEJGT


RUSTY $=96872$
26. $Z X W V=1375$

Opposite letter No. coding
27. A place value is $\rightarrow 7$

B place value is $\rightarrow 9$
C place value is $\rightarrow 1$
D place value is $\rightarrow 3$
E place value is $\rightarrow 4$
M place value is $\rightarrow 5$
$N$ place value is $\rightarrow 8$
So
BADMAN
||||||
973578
28.

29.
(6)

30. $\Delta \rightarrow+$
$\theta \rightarrow \times$
$\square \rightarrow \div$
$\phi \rightarrow-$
31. in clockwise direction every quare a figure adding
32. every first $(A)$ and second figure $(B)$ is in reverse order
37. all are in clockwise direction so (B)
38. $5 \times 2=10$
39. $1^{2}+2^{2}+3^{2}=14$
47. there are 5 block
48. in the base there are 5 block then 4 block then 3 , then 2 then 1 block, so square of every block from base $1^{2}=1$
$2^{2}=4$
$3^{2}=9$
$4^{2}=16$
$5^{2}=25$
55
49. $2=5$
$1=6$
$3=4$
50. Standard cube
$1+6=7$
$2+5=7$
$3+4=7$

