

NTSE-2015-16 (Stage-I)

SOLUTIONS

MAT

Time allowed : 45 Min. Maximum Marks : 50

1. Alphabet in decreasing order in series

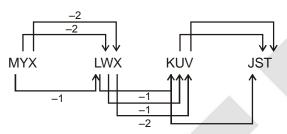
$$Z \xrightarrow{-3} W \xrightarrow{-4} S \xrightarrow{-5} N \xrightarrow{-6} F$$

+3

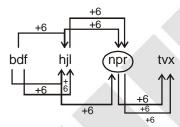
2. AN CP FS

JV

3.



4.



5.
$$2^{3} - 8$$
$$3^{3} - 27$$
$$4^{3} - 64$$
$$5^{3} - 156$$

6.
$$5+6=11$$

 $11+8=19$
 $19+10=29$
 $29+12=41$

7.
$$5^{3} - 5 = 120$$

$$4^{3} - 4 = 60$$

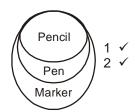
$$3^{3} - 3 = 24$$

$$2^{3} - 2 = 6$$

$$1^{3} - 1 = 0$$

8. 729, 81, 9, 1,
$$\frac{1}{9}$$
, $\frac{1}{81}$, $\frac{1}{729}$

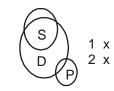
9.



10.

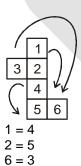


11.

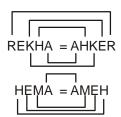


- 12. 3, all three are different
- 13. delhi is in India and India is in asia
- 14. No. 20 is place in all three circle
- 15. 5 + 17 + 14 = 34 persons
- 16. in option 4, letter are in jumbling order
- 17. Every first No. is a square of 2nd no. but in option 3rd it is not applicable
- 18. All three things are use on the black board.
- 19. Shimla is not state
- 20. 5 = 6 1 = 23 = 4
- 21. 1 = 5 2 = 63 = 4
- 22. x = 3 cmTotal no. of cubes = $(x)^3 = (3)^3 = 27$

23.

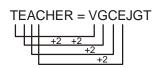


24.



25. Add (+2) in every next letter





26. ZXWV = 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

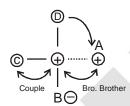
N place value is \rightarrow 8

So

BADMAN

973578

28.



29.



30.
$$\Delta \rightarrow +$$

$$\theta \rightarrow x$$

$$\square \rightarrow \div$$

$$\phi \rightarrow -$$

- 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. $5 \times 2 = 10$

 $1^2 + 2^2 + 3^2 = 14$ 39.

47. there are 5 block

in the base there are 5 block then 4 block then 3, then 2 then 1 block, so square of every block from base $1^2 = 1$ $2^2 = 4$ $3^2 = 9$ $4^2 = 16$ $5^2 = 25$ 48.

55

49. 2 = 5

1 = 6

3 = 4

50. Standard cube

1 + 6 = 7

2 + 5 = 7

3 + 4 = 7

