

FIITJEE

NATIONAL TALENT SEARCH EXAMINATION, 2017-18

MENTAL ABILITY ANSWER KEY

QUE.	1	2	3	4	5	6	7	8	9	10
ANS.	1	4	1	4	2	4	3	1	4	1

QUE.	11	12	13	14	15	16	17	18	19	20
ANS.	2	2	1	3	2	2	4	3	4	3

QUE.	21	22	23	24	25	26	27	28	29	30
ANS.	3	1	3	2	2	3	1	3	2	4

QUE.	31	32	33	34	35	36	37	38	39	40
ANS.	3	1	3	2	3	4	2	3	1	1

QUE.	41	42	43	44	45	46	47	48	49	50
ANS.	2	1	4	2,4	2	1	1	3	4	3

MENTAL ABILITY SOLUTIONS

1. (1) FN

Logic	BJ	DL	HP	PX	FN
	2 10	4 12	8 16	16 24	32 40

32 = 26 + 6 = F
 40 = 26 + 14 = N

2. (4)

+4	+4	+4	+4
AYCD	EUGH	IQKL	MZBC

MZBC
 (3rd placed - 1) will give 2nd place and opposite like B - 1 = A opposite Z.

3. (1)

Only 141 is not a prime no.

4. (4)

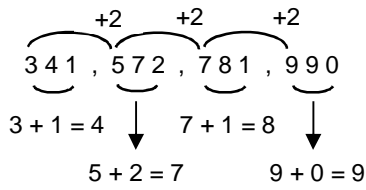
Sum of all number
 6 + 1 + 3 + 1 = 11
 2 + 1 + 9 + 1 → 13
 3 + 3 + 1 + 2 → 9
 3 + 1 + 6 + 4 → 14 (14 is even)

5. (2)

4	8	12	16
D	H	L	P
6	14	21	28
F	N	U	B
11	22	33	44
K	V	G	R

G 33 → 26 + 7
 R 26 + 18 → R

6. (4)



7. (3)

155 by BODMAS
 $\frac{200}{5} + 25 + 20 \times 5 - 10$

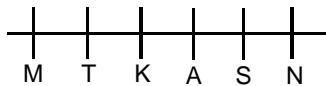
8. (1)

4 side divided into 4
 10 side divided into 10

9. (4)

Mirror image + Centre rotating

10. (1)



11. (2)

$\left(\begin{matrix} 1 & (6 & 5) \\ 1 & 3 & 1 \\ 2 & 3 & 4 \end{matrix} \right)$ difference
 5 3 3
 Similarly $\frac{2}{7} \frac{6}{9} \frac{2}{1}$

12. (2)

Logical

13. (1)

$\frac{B E A T}{2 5 1 20} = 2 + 5 + 1 + 20 = \frac{28}{4} = 7$
 Logic → Sum of all place then divide by 4.

14. (3)

Logic Pattern N K M L J O Q P K

15. (2)

Logical

16. (2)

S O L V E
 +0 +1 +2 +3 +4 logic
 S P N Y I

17. (4)

L A R G E
 -1 -1 -1 -1 -1
 K Z Q F D

18. (3)

Logical

19. (4)
Logical
20. (3)
8
21. (3)

$$\begin{array}{cccc} 9 & 10 & 34 & 35 \\ \hline 57 & 58 & 66 & 67 \\ \hline 61 & 44 & 48 & 63 \end{array}$$
22. (1)
See the logic of the numbers from pattern.
23. (3)
 $27 \rightarrow 2 \times 5 + 2 \times 2 \times 3 + 1 \times 5$
24. (2)
13
25. (2)
26. (3)
 $N^2 - 8$
27. (1)
Logic pattern
28. (3)
 $2 \times 2 + 2 \rightarrow 6$
 $6 \times 3 + 3 \rightarrow 21$
 $21 \times 4 + 4 \rightarrow 88$
 $88 \times 5 + 5 \rightarrow 445$
29. (2)
 $2^2 + 2 \rightarrow 6$
 $3^3 + 3 \rightarrow 30$
 $4^2 + 2 \rightarrow 18$
 $5^3 + 3 \rightarrow 128$
 $6^2 + 2 \rightarrow 38$
30. (4)
02, 13, 34, 56
Check row and column.
31. (3)
11, 13, 67, 69
Check row and column.
32. (1)
1 October was Monday So, 4 November will be Sunday
33. (3)
All boxes shifting one down the column.
34. (2)
Logical
35. (3)

$$\left. \begin{array}{ccc} A & M & K \\ S & P & J \end{array} \right\} +18, +3, -1$$

 Similarly,

$$\left. \begin{array}{ccc} K & N & M \\ C & Q & L \end{array} \right\} +18, +3, -1$$
36. (4)

$$\left. \begin{matrix} N & 9 & M \\ P & 11 & Q \end{matrix} \right\} +2, +2, +4$$

Similarly,

$$\left. \begin{matrix} K & N & M \\ C & Q & L \end{matrix} \right\} +2, 12, +4$$

37. (2)
6 km (Direction sense test question)

38. (3)

Logic	0001	0011	0111	1111
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39. (1)

PLAYERS	Foot Ball	Base Ball	Cricket	Volley Ball	Hockey
Hemant	√	√	x	√	√
Madhav	x	√	x	√	√
Govind	x	x	√	√	√
Ramesh	√	√	√	√	x
Anant	√	√	x	x	x

40. (1)

PLAYERS	Foot Ball	Base Ball	Cricket	Volley Ball	Hockey
Hemant	√	√	x	√	√
Madhav	x	√	x	√	√
Govind	x	x	√	√	√
Ramesh	√	√	√	√	x
Anant	√	√	x	x	x

41. (2)
Logical

42. (1)
Logical

43. (4)
Folding logic

44. (2) & (4) both option are correct

45. (2)

$$\left. \begin{matrix} 13 \rightarrow 1 + 3 = 4 \\ 19 \rightarrow 1 + 9 = 10 \end{matrix} \right\} \text{So, } 10 - 4 = 6$$

Similarly,

$$\left. \begin{matrix} 31 \rightarrow 3 + 1 = 4 \\ 37 \rightarrow 3 + 7 = 10 \end{matrix} \right\} \text{So, } 10 - 4 = 6$$

46. (1)

$$8^2 \rightarrow 64$$

$$7^3 \rightarrow 343$$

$$7^2 \rightarrow 49$$

$$6^3 \rightarrow 216$$

Similarly,

$$6^2 \rightarrow 36$$

$$8^3 \rightarrow 512$$

47. (1)
Logic unfolding

48. (3)
Logical

49. (4)
Logical Venn Diagram

50. (3)
Logical Venn Diagram