



NATIONAL TALENT SEARCH EXAMINATION (NTSE_2019-20) STAGE -1 STATE : KERALA (CODE-D) PAPER : MAT

Date: 17.11.2019

Max. Marks: 100

SOLUTIONS

Questions 1 to 5:

In these questions each word is represented by numerals. Using the same code find the word denoting a group of numerals or write a given word using the numerals, as the case may be.

1. If 324156 denotes FOREST, then STORE will be coded as:

(1) 56241	(2) 65241
-----------	-----------

(3) 56214 (4) 56412

Ans. 1

Sol. $324156 \rightarrow \text{FOREST}$

F=3 E=1 O=2 S=5 R=4 T=6

Therefore STORE \rightarrow 56241

2. If 2413564 denotes STARLET, then LATER will be coded as:

(1) 51436	(2) 41563
(3) 54163	(4) 51463

Ans. 4

Sol. 2413564 \rightarrow STARLET

S=2 L=5

O=2 E=6

R=4 T=6

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Therefore LATER \rightarrow 51463
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3. If 3554123 denotes ELLIPSE, what does 214552 denote?

(1)	PEELS	
(1)	I LLLD	

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(3) SLIPS
```

Ans. 2

Sol.	E=3	2=S
	L=5	1=P
	I=4	4=I
	P=1	5=L
	S=2	5=L
	E=3	2=S

(2) SPILLS

(4) LISPS

Path to	Success ALL Success				KERALA	I	MAT	_NTSE	STAGE	_	I_17-11-2019_CODE-D	
4.	If FEVER	is writte	en 21314	and LOWE	R is writte	n 765	14, hov	w is FLOV	VER writ	ten in	the code?	
	(1) 367514	Ļ				(2)	376514	4				
	(3) 267514	ļ				(4)	276514	4				
Ans	. 4											
Sol.		F=2	L=7	F=2								
		E=1	O=6	L=7								
		V=3	W=5	O=6								
		E=1	E=1	W=5								
		R=4	R=4	E=1								
				R=4								
5.	If 6713458	denote	s PROB	LEM and 82	27345 den	otes N	ARBI	LE, how is	S PROBA	BLE	written?	
	(1) 671332	245				(2)	67123	345				
	(3) 671323	845				(4)	67132	354				
Ans	. 3											
Sol.		6=P	8=M	P=6								
		7=R	2=A	R=7								
		1=O	7=R	O=1								
		3=B	3=B	B=3								
		4=L	4=L	A=2								
		5=E	5=E	B=3								
		8=M		L=4								
				E=5								
	Questions	6 to 9	: •									
	In the follo odd figure	Questions 6 to 9: In the following questions one of the figures does not follow the pattern in the other three figures. Choose the odd figure in each question.										



Sol. By observation



Ans. 3

Sol. By observation

Path to Success



Ans. 3

Sol. By observation



Ans. 4

Sol. By observation

Questions 10 to 12:

These questions are based on the three positions of a die shown in the figure. The faces are numbered 1 to 6.



10. Which number is opposite 4?

(1) 1	(2) 2
(3) 3	(4) 6

Ans. 2

AIIS	. 2	
Sol.	$\begin{array}{c c} 1 \\ 2 \\ 1 \\ 1 \end{array} \begin{array}{c} 1 \\ 4 \\ 1 \\ 1 \end{array} \begin{array}{c} 1 \\ 4 \\ 1 \\ 1 \end{array} \begin{array}{c} 3 \\ 4 \\ 4 \\ 1 \\ 1 \end{array} \begin{array}{c} 3 \\ 4 \\ 1 \\ 1 \\ 1 \end{array} \begin{array}{c} 1 \\ 1 \\ 1 \\ 1 \end{array} $	
	From I & II we get	
	2 is opposite to 4	
	3 is opposite to 5	
	1 is opposite to 6	
11.	Which number is opposite 5?	
	(1) 3	(2) 2
	(3) 4	(4) 6
Ans	. 1	
12.	Which number is opposite 1?	
	(1) 3	(2) 4
	(3) 5	(4) 6
Ans	. 4	



Questions 13 to 16:

Each of the items 13 to 16 consists of a square of 9 cells in three rows and three columns. The designs in each row or column follow the same rule. Choose the correct answer from among the given alternatives to suit the cell indicated by the question mark.

(2)

(4)









Sol. By observation







- (1) Friday
- (3) Thursday (4) Sunday

Sol. 1st and last day of simple year is same therefore in leap year one day is extra saturday

18. If 343 = 100 and 121 = 16, then 250 is:

(1) 25	(2) 49
(3) 125	(4) 64

Ans. 2

Sol. $3+4+3=10=(10)^2=100$ $1+2+1 \Rightarrow 4=(1)^2=16$ $2+5+0 \Rightarrow 7=(7)^2=49$ $2+5+0 \Rightarrow =7=(7)^2=49$ (2) Saturday

19. If in the word SCRAMBLE, all the consonants are replaced by the preceding letter and all the vowels are replaced by the succeeding letter which letter will be the third form the left? form the left?

	rep	laced	l by	the s	uccee	ding	lette	er, wi	nch l	etter w	ill be	the th	ird to	orm
	(1)	S									((2) Q		
	(3)	В									((4) L		
Ans	. 2													
	S	С	R	A	M	В	L	Ε						
Sal	\downarrow	\downarrow	\downarrow	\downarrow	\downarrow	\downarrow	\downarrow	\downarrow						
501.	R	В	Q	В	L	A	K	F						
20.	If '	CAT	' is 1	epre	sente	d by	'FD	W',	then '	RAIN	' is r	epresei	nted b	by:
	(1)	UD	LQ								((2) UI	DMQ	
	(3)	TD	LQ								((4) TE	QL	
Ans	. 1													
Sol.		С-	+3	$\rightarrow F$	R	+3	$\rightarrow U$	T						
		A-	+3->	·D	A	+3	$\rightarrow D$)						
		T-	+3->	W	I-	+3	$\rightarrow L$							
					N	+3	$ \rightarrow Q $)						

21. If blue means green;

green means white;

white means yellow;

yellow means black and

black means red,

then what is the colour of milk?

- (1) White
- (3) Black
- Ans. 4
- Sol. By observation

22. If 16 is related to 125, then the number related to 49 is :

(1) 64 (2) 343 (3) 1024 (4) 512

Ans. 4

Sol.	16:125 then 49 : ?			
	$4^2:5^3$	$7^2: 8^3$	→512	
23.	If doctor = 18 ; eng	gineer = 2	24, principal = 27, then $\frac{1}{2}$	teacher = ?
	(1) 17			(2) 20
	(3) 21			(4) 22

Ans. 3

Sol. No of letters x 3

(2) Yellow

(4) Green

Path to		KERALA	MAT	_NTSE	STAGE	_	I_17-11-2019_CODE-D
24.	How many such pairs of letter them as in the English alphabe	ers are there in the word	I NIGHT	Γ; each of	which I	has as	many letters between
	(1) 4	(2	2) 3				
	(3) 2	(4) 1				
Ans	s. 4						
Sol.	NIGHT						
25.	If 'bag' is called 'box',						
	'box' is called 'pen' and						
	'pen' is called 'umbrella',						
	then what will a child write wi	ith ?					
	(1) Bag	(2) Box				
	(3) Pen	(4) Umbr	ella			
Ans	. 4						
Sol.	By observation						
26.	If ONE is represented by 7812	234 and TWO is represe	nted by	134657, 1	then TH	REE is	represented by :
	(1) 256814	(2	.) 25682	23			
	(3) 256923	(4) 25691	4			
Ans	. 4						
Sol.	25 6914						
	$ONE \rightarrow 78/12/34 \rightarrow \{difference \}$	èrence between pair of	digits is	one}			
	TWO \rightarrow 13/46/57 \rightarrow {diff	ference between pair of	digits is	two}			
	THREE $\rightarrow 25/69/14 \rightarrow \{c$	lifference between pair o	of digits	is THRE	E}		
27.	If the digits of the number 567 position?	9482 are arranged in as	cending	order, hov	v many c	ligits w	vill remain in the same
	(1) 1	(2	2) 2				
	(3) 3	(4) 4				
Ans	. 1						
	5(70)						
Sol.	2 4 5 6 7 8 9						
	Questions 28 to 29 ·						
	Number problems are given in	the following questions	Read t	he proble	m and ar	nswer f	he questions
28	How many numbers from 11 t	~ 50 are there which are	exactly	divisible.	hv 7 hut	not hy	3 ?
201	(1) 2	()	() 4	arvisiole	oy / out	not by	5.
	(1) 2 (3) 5	(4) 6				
Ans	(3) 5 A 2) 0				
Sol.	Numbers are 14 28 35 49						
29.	The sum of odd numbers betw	veen 20 and 30 is ·					
•	(1) 125	()) 120				
	(3) 140	(4) 145				
Ans	s. 1		,				
Sol.	Simple addition : 21+23+25+27	7+29					

Path to 1		KERALA	I MAT	_NTSE	STAGE	_	I_17-11-2019	_CODE-D
	Questions 30 to 34 :							
	What is the next number in the series ?							
30.	1, 2, 10, 37, 101, ?							
	(1) 139		(2) 175					
	(3) 226		(4) 253					
Ans	. 3							
Sol.	$1, 2, 10, 37, 101, 226$ $1 8 27 64 125$ $(1)^{3}(2)^{3}(3)^{3}(4)^{3} (5)^{3}$							
31.	27, 64, 125, 216, ?							
	(1) 256		(2) 343					
	(3) 512		(4) 729					
Ans	. 3							
Sol.	27, 64, 125, 216, ? (343) 3 ³ , 4 ³ , 5 ³ , 6 ³ , 7 ³							
32.	7, 8, 12, 21, 37, ?							
	(1) 62		(2) 63					
	(3) 64		(4) 65					
Ans	. 1							
Sol.	7, 8, 12, 21, 37, ? 62 7 4 9 16 25 $(1)^{2} (2)^{2} (3)^{2} (4)^{2} (5)^{2}$							
33.	128, 64, 16, 2, ?							
	(1) $\frac{1}{8}$		(2) $\frac{1}{16}$					
	(3) $\frac{1}{32}$		(4) $\frac{1}{64}$					
Ans	. 1							
Sol.	128, 64, 16, 2, ? $1/8$ $\div 2 \div 4 \div 8 \div 16$							
34.	6, 11, 20, 37, ?							
	(1) 66		(2) 68					
	(3) 70		(4) 73					
Ans	. 3							
Sol.	$\begin{array}{c} 6, \ 11, \ 20, \ 37, \ 370 \\ \downarrow \\ x^{2-1} \ x^{2-2} x^{2-3} \ x^{2-4} \end{array}$							

- 35. If the letters of the word PRINCE are rearranged as they appear in the English alphabet, the position of how many letters will remain unaffected by the rearrangement ?
 - (1) 1(2) 2(3) 3 (4) 4

Sol. PC E I N P R

36. Abhishek's rank is 23rd from the top and 27th from the bottom in his class. How many students are there in the class ?

(1) 48	(2) 49
(3) 50	(4) 51

Ans. 2

$$\begin{bmatrix} 22 \\ Abhishek \\ 26 \end{bmatrix}$$
 Total = 49

- 37. In a row of children facing North, Ravi is twelfth from the left end. Rohit is twelfth from the right end and fourth to the right of Ravi. How many children are there in the row ?
 - (2) 25 (1) 27 (4) 26
 - (3) 24

```
Ans. 1
```

Sol. 11 Students Ravi 3 Rohit 11 students Total student = 27

Questions 38 to 41 :

Find the odd one out from the given alternatives.

38. (1) Rhombus (2) Rectangle (3) Square (4) Trapezium Ans. 4 Sol. Diagonals bisect each other all other three. **39.** (1) Tree (2) Leaf (3) Flower (4) Fruit **Ans.** 1 Sol. By observation **40.** (1) Sweet (2) Sour (3) Bitter (4) Hot

Ans. 4

Sol. By observation

Path to		KERALA		MAT	_NTSE	STAGE	_	I_1	17-11-2019	_CODE-D
41.	(1) Table		(2)	Chair						
	(3) Cupboard		(4)	Compu	ter					
Ans	. 4									
Sol.	By observation									
	Questions 42 to 44 :									
	There is some relationship between the trelationship exists between the terms.	wo terms	in the	questior	n. Find th	ne correct	alterr	nativ	e where t	he same
42.	MORE : ROME									
	(1) LION : OILN		(2)	BEAR	: REAB					
	(3) LIAR : AIRL		(4)	RANK	: NAKF	ξ				
Ans	. 4									
Sol.	M O R E : R O M F									
43.	OFTEN : FOTNE									
	(1) FIRST : IFRST		(2)	BREAI) : BRE	DA				
	(3) PLANT : LPBTN		(4)	BRAN	D : RBA	DN				
Ans	. 3									
Sol.	OF DEN:FOD NE Interchanges Remain same Interchange									
44.	DART : ARDT									
	(1) PARK ; ARKP		(2)	DENT	: ENTD					
	(3) BARK : ARBK		(4)	DIRT :	ARBK					
Ans	. 3									
Sol.	DART; ARDI									
	BARK; ARBK									

Questions 45 to 49 :

In each of these questions, the four problem figures in each row make a series. Find out the one which would come next in the series from among the answer figures given.

45. Problem Figures :



Answer Figures :



Ans. 3

Sol. By observation



46. Problem Figures :



Answer Figures :



Ans. 1

- Sol. By observation
- 47. Problem Figures :





Ans. 4

- Sol. By observation
- **48.** Problem Figures :



Answer Figures :

$$(1) (2) (3) (4)$$

Ans. 2

- Sol. By observation
- **49.** Problem Figures :



Answer Figures :

$$\begin{array}{c|c}
\hline
 \\
(1) \\
(2) \\
(3) \\
(4)
\end{array}$$

Ans. 2 Sol. By observation

Path to	CAREER INSTITUTE	KERALA	I MAT	_NTSE	STAGE	_	I_17-11-2019_CODE-D
50.	If A\$B means 'A is greater than B'	and A#B mean	s 'A is less	than B', v	what does	A\$B#C	C mean?
	(1) A is greater than B and C		(2) C is le	ss than A	and B		
	(3) A and C are greater than B		(4) A and	C are les	s than B		
Ans	. 3						
Sol.	K \$ B # C						
	\Rightarrow A > B < C						
	\Rightarrow A, C > B						
51.	A is older than B. C is younger than	B and D. D is	not as old a	s A. Who	among A	, B, C,	D is the oldest ?
	(1) A		(2) B				
	(3) C		(4) D				
Ans	. 1						
Sol.	A > B, $B & D > C$, $A > D$						
52.	In a certain code DEAL is written \$	35@ and SOL	E is written	#7@3. H	low is SO	LD wr	tten in the code ?
	(1) #@37		(2) #\$@3				
	(3) #@7\$		(4) #7@\$				
Ans	. 4						
Sol.	#7@\$						
	$Deal \rightarrow \$35@$						
	$SOLE \rightarrow \#7@3$						
53.	If the order of the letters in the Engl letter from the right ?	ish alphabet is	reversed, wl	nich letter	will be f	ifth to t	he right of the tenth
	(1) E		(2) F				
	(3) G		(4) H				
Ans	. 1						
Sol.	E{ by observation}						
54.	A, B, C, D are sitting around a circle C. What is the position of B ?	e and facing the	centre. D is	to the im	mediate le	eft of C.	A is between B and
	(1) to the immediate right of C		(2) to the	immediat	e left of A	1	
	(3) between A and C		(4) to the	immediat	e left of I)	
Ans	. 4						
Sol.	to the immediate left of D						
55.	If all the letters of the word QUES immediately following it in the Engli	TION are rear	ranged in al hat will be t	phabetica he new ai	al order an rangemer	nd subs nt of lett	tituted by the letter ers?
	(1) FJOPRUVT		(2) FJOPI	RTUV			
	(3) FJOPRUTV		(4) FJOPI	RTVU			
Ans	. 2						
Sol.	QUESTION $\rightarrow EINOQSTU$						
	▼ FJOPRTUV						

56. How many 3's are there in the follo 2^{2}	wing sequence, immediately preceded by a 3 and immediately followed by
a 5 ?	
(1) 5	(2) 6
(1) 3 (2) 7	$(2) \ 0$
(3) / Ans 2	(4) 8
Ans. 2 Sol 6	
33836 33333 88333 88333	68386 33
57 If $I = 30$ and $T = 60$ then $I = 2$	
(1) 36	(2) 45
(1) 50 (3) 51	(2) 13 (4) 54
Ans. 1	
Sol. 36	
$J=10 \rightarrow 10x3=30$	
$I=20 \rightarrow 20x3=60$	
$I = 12 \rightarrow 12x^3 = 36$	
58 Which of the following words com	es last when arranged in dictionary order ?
(1) Success	(2) Succeed
(1) Successively	(4) Successfully
Ans. 3	(i) Successivily
Sol. Successively { by observation}	
59. A" man walks 10 kilometers due N	orth. Then he turns right and walks 12 kilometers. Again he turns right and
walks 5 kilometers. How far is he	from the starting point ?
(1) 13 kilometers	(2) 15 kilometers
(3) 17 kilometers	(4) 18 kilometers
Ans. 1	
Sol. 13 Kilometers (using pythagoras th	leorem)
60. Which word cannot be formed from	n the letters of the word EXAMINER ?
(1) EXAMINE	(2) REMAIN
(3) MANIA	(4) MINOR
Ans. 4	
Sol. MINOR (by observation)	
Questions 61 to 63 :	
These questions are based on letter correct alternative from the given	series. In each of these letter series some letters are missing. Choose the choices.
61. a _ a c b b a c a _ b b a c a _ b b ;	a _ a c b b
(1) c c c c	(2) a b a b
(3) b a b a	(4) a c a c
Ans. 1	
Sol. cccc	

 $a\underline{c}acbb|aca\underline{c}bb|aca\underline{c}bb|a\underline{c}acbb|$

Path to .		KERALA		MAT	_NTSE	STAGE	_	I_17-11-2019_CODE-D
62.	x x y _ y z x x y z y _ x _ y z y z _ x	y z y z						
	(1) x x y y		(2)) zzxy	x			
	(3) y y x x		(4)) x z y z	Z			
Ans	. 2							
Sol.	ZZXX							
	mn <u>m</u> mnm m <u>n</u> m mnm mnm <u>m</u> m	m mnm m	<u>n</u> m					
63.	m n _ m n m m _ m m n m m n m _ n	nmmnmı	n _ m	1				
	(1) m m m n		(2)) nnn	n			

(3) m n m n	(4) n m n m

```
Sol. mnmn
```

mnm mnm mnm mnm mnm mnm mnm mnm

64. In a music band all except 4 are singers, all except 4 are guitarists and all except 4 are violinists. How many are there in the band ?

(1) 4	(2) 6	
(3) 8	(4) 1	2

Ans. 2

Sol. 6

```
let singers \rightarrow S
```

```
Guitarist \rightarrow G
```

```
Violinists \rightarrow V
```

```
According ot Questions \rightarrow
```

G+V=4-----(1)

G+V=4-----(2)

S+G=4-----(3)

by adding (1), (2) & (3)

2(S+G+V) = 12

S+G+V=6

Questions 65 to 69 :

Out of 30 students in a class, 4 play cricket and hockey, 5 play cricket and football and 10 play hockey and football. 4 play cricket only, 8 play hockey only and 5 play football only. Each student plays one or more of the three games.

65.	How many	students	do not play	cricket?
-----	----------	----------	-------------	----------

(1)	18	(2) 2	0
(3)	22	(4) 2	5

Ans. 2





Given

A=5 ------(1)
B=4 -------(2)
C=8 -------(3)
E+F=4 ------(4)
E+G=5 ------(5)
D+E=10 ------(6) &
A+B+C+D+E+F+G=30------(7)
Adding equation (4), (5) & (6) -----
3E+F+G+D=19-2E -------(8)
For equation (7)
A+B+C+D+E+F+G=30
5+4+8+19-2E=30

$$\Rightarrow -2E =-6$$

 $\Rightarrow E=3$
From equation (4) & (5) & (6) by putting E=3
F=1, G=2, D=7
A+D+C
 $\Rightarrow 5+7+8$
 $\Rightarrow 20$
66. How many students play exactly two games ?
(1) 7 (2) 8
(3) 9 (4) 10
Ans. 4
Sol. 10
 $\Rightarrow G+D+F$
 $\Rightarrow 2+7+1$
 $\Rightarrow 10$

Path to	CAREER INSTITUTE KOTA (RAJASTHAN)	KERALA	l	MAT	_NTSE	STAGE	_	I_17-11-2019_CODE-D
67.	How many students play all the three g	ames ?						
	(1) 1		(2) 2				
	(3) 3		(4) 4				
Ans	. 3							
Sol.	Because 'E' indicates the persons who	play all 3	game	es i-e 3				
68.	How many students play neither hockey	y nor footb	all ?					
	(1) 2		(2) 4				
	(3) 5		(4) 7				
Ans	. 2							
Sol.	Students who play neither hockey nor for	ootball ie o	only c	cricket [4]]			
69.	How many students play cricket and ho	ckey but r	not fo	otball?				
	(1) 1		(2) 2				
	(3) 3		(4) 4				
Ans	. 4							

Sol. 4 students play cricket & hockey but not football

Questions 70 to 79 :

In each of these questions, the numbers in the figures follow a certain pattern. There is a number missing marked by ?. Find out the missing number from among the four alternatives.

	2	3	5	
70	30		?	
/0.	23	17	12	
	(1)	5		(2) 7
	(1) (3) 8	8		(2) / (4) 10
Ans.	3			

Sol. 8

```
2+1=3, 3+2=5, 5+3=8, 8+4=12, 12+5=17
```

17+6=23, 23+7=30





(3) 23	(4) 24

Sol. opposite no are double with addition one.



Path to .		KERALA	I MAT	_NTSE	STAGE	_	I_17-11-2019_CODE-D
74.	28 ? 14 35 42 49						
	(1) 20		(2) 21				
	(3) 22		(4) 23				
Ans.	. 2						
Sol.	21						
	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$						
75.		8					
		6					
	(1) 20		(2) 22				
	(3) 24		(4) 26				
Ans	. 4						
Sol.	26						
	$\Rightarrow (5x3)-(2x1)=13$						
	$\Rightarrow (\delta X /) - (\delta X J) - 20$						
76.	2 ? 4 16 7 11						
	(1) 22		(2) 23				
	(3) 24		(4) 25				
Ans.	. 1						
Sol.	22						
	-						



2+2=4, 4+3=7, 7+4=11, 11+5=16 [16+6=22]

Path to 2		KERALA	I MAT	_NTSE	STAGE	_	I_17-11-2019_CODE-D
77.	8 16 48 7 ? 42						
	(1) 11		(2) 12				
	(3) 13		(4) 14				
Ans	. 4						
Sol.	14						
	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$						
78.	3 23 15 9						
	(1) 30		(2) 31				
	(3) 32		(4) 33				
Ans	. 4						
Sol.	33						
	3+2=5, 5+4=9, 9+6=15, 15+ 23+10=33	-8=23,					
79.	4 16 36 64 100 ?						
	(1) 121		(2) 144				
	(3) 169		(4) 196				
Ans	. 2						
Sol.	144						
	2^2 4^2 6^2						

2	-	0
4	16	36
64	100	?144
8 ²	10 ²	12^{2}

Polit to Success

80. A is to the North of B and C is to the South of B. C is also East of D. In which direction is D with respect to

- A?
- (1) South-West
- (3) North-West

- (2) South-East
- (4) North-East

- Ans. 1
- Sol. South West



81. How many meaningful four lettered English words can be formed with the letters EOSR using each letter only once in each word ?

(1) 0	(2) 1
(3) 2	(4) 4

Ans. 4

- **Sol.** Four meansingful letterd are \rightarrow SORE, ROSE, EROS, ORES
- 82. If the first day of a non-leap year falls on Tuesday, then the 15th of August of the same year falls on :
 - (1) Tuesday (2) Thursday
 - (3) Friday (4) Saturday

Ans. 2

Sol. Thursday [by counting no of odd days]

Questions 83 to 86 :

Four groups of letters are given in each of these questions. Out of these, one differs from the others. Find that group of letters.

83. SUY, EJO, OQU, ACEC

(1) SUY	(2) EJO
(3) OQU	(4) ACE

Ans. 1

Sol. SUY

Except SUY, every one have two vowels

84. BF, JN, PT, WZ

(1) BF	(2) JN
(3) PT	(4) WZ

Ans. 4

Sol. WZ

except WZ, every one have difference 4 between letters

85.	YXZ, EFD, LMK, UVT
	(1) YXZ

(3) LMK (4) UVT

Ans. 1

Sol. YXZ (by observation)

(2) EFD

Path to 2		KERALA	I	MAT	_NTSE	STAGE	_	I_17-11-2019_CODE-D
86.	ABZ, PQO, GHF, LMN							
	(1) ABZ		(2) PQO				
	(3) GHF		(4) LMN				
Ans	. 4							
Sol.	LMN(by observation)							
	Questions 87 to 90 :							
	A solid cube of side 3 centime blue. It is then cut into 27 sn	neters is painted red on all cubes.	on the	top and b	oottom fa	aces. The	remaii	ning faces are painted
87.	How many small cubes will	have only one face p	aintec	d blue ?				
	(1) 4		(2) 6				
	(3) 8		(4) 10				
Ans	. 1							
Sol.	4							
88.	How many small cubes will	have one face red ar	nd one	e face blu	ie?			
	(1) 6		(2) 8				
	(3) 10		(4) 12				
Ans	. 2							
Sol.	8							
89.	How many small cubes will	have two faces blue	and o	one face i	red?			
	(1) 8		(2)) 10				
	(3) 12		(4) 16				
Ans	. 1							
Sol.	8							
90.	How many small cubes will	have no face painted	[?					
	(1) 1		(2) 2				
	(3) 3		(4) 4				
Ans	. 1							
Sol.								
	Questions 91 to 92 :							
	These questions are based of	n the following figure	e .					
91.	The number of triangles in the	ne figure is :						
	(1) 38	-	(2) 48				
	(3) 44		(4) 40				
Ans	. 2							

Sol. 48 { by observation}

Path to		KERALA	I MAT	_NTSE	STAGE	– I_17-11-2019_CODE-D		
92.	The number of squares in the figure is	5 :						
	(1) 28		(2) 30					
	(3) 32		(4) 34					
Ans	. 4							
Sol.	34 { by observation}							
	Questions 93 to 95 :							
	There is some relationship between the exists between the two terms to the remissing term.	he two terms ight of the sig	(letters) t gn. One of	o the left of the two te	f the sign : rms on the	: . The same relationship right is missing. Find the		
93.	COMB : XLNY : : MIRROR : ?							
	(1) NRIILI		(2) NIR	RLR				
	(3) NRQQPQ		(4) NJS	SPS				
Ans	. 1							
Sol.	NRIILI COM B · XLNY { Opposite lette	ers natterns 1	MIRROR	· NRILLI				
04	NDORE - IOEDSE DHODAL - 2	is parterns.		,				
94.	(1) ACNOZY		(2) CDIOMB					
	(1) AUROZK $(2) AUROZK$		(2) CFI	OBM				
Ans	(5) ANOOZK		(4) CIF	QDM				
Sol.	CIPQBM							
	INDORE							
	+1 $+1$ $+1$ $+1$ $+1$ $+1$							
	J O E P S F							
	BHOPAL							
	+1 $+1$ $+1$ $+1$ $+1$ $+1$							
	C I P Q B M							
95.	HOUSE : FTVPI: : CHAIR : ?							
	(1) SBJID		(2) SJB	ID				
	(3) DJBIS		(4) DIB	JS				
Ans	. 2							
Sol.	SJBID							
	$\begin{array}{c c} H & \uparrow F+1 \\ O & \uparrow T+1 \\ U & \downarrow V+1 \\ S & \downarrow P+1 \\ E & \downarrow I+1 \end{array} + 1 \begin{array}{c c} C & \uparrow S \\ H & \downarrow J \\ A & \downarrow F \\ I \\ R & \downarrow I \\ I \\ R \end{array}$	3						



Questions 96 to 97 :

Choose the correct alternative from those given, in which the letter pair on the left bears the same relationship to the letter pair on the right as in the question.

96. CX : FU

(1) DW : GV	(2) HS : JQ
(3) IR : KQ	(4) LO : EW

Ans. 2

Sol. HS: JQ { by observation opposite letters patterns.

97. IO : OU

(1) GM : PV	(2) AG : KP
(3) IM : RV	(4) FK: QV

Ans. 1

Sol. GM: PV { by observation}

Questions 98 to 100 :

In these questions there exist some relationship-between the terms to the left of the sign : : as between the terms to the right. Identify the missing term from the given options.

98. Strong : Weak : : Broad : ?

(1) Long	(2) Tall
(3) Narrow	(4) Short
Ans. 3	
Sol. Narrow { by observation}	
99. Mars : Planet: : Pumpkin : ?	
(1) Garden	(2) Vegetable
(3) Soup	(4) Plant
Ans. 2	
Sol. vegetables{ by observation}	
100. Garden : Gardener : : Agriculture : ?	
(1) Farm	(2) Farmer
(3) Plant	(4) Farm produce
Ans. 2	
Sol. Farmers { by observation}	