

NTSE STAG 1, 2018-19 GUJARAT STATE

MENTAL ABILITY (Paper – 1)

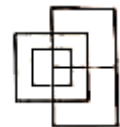
Instruction: In each of the following question no. 1 to 10, a number series is given with missing of one term. Choose the correct alternative that will continue the same pattern and replace the question mark (?) in the given series:

1. 2,3,5,9,17
(A)34 (B)31 (C)32 (D)33
2. 2,7,12,17,?,27
(A)18 (B)22 (C)19 (D)23
3. 11,121, 1331,?
(A) 14641 (B) 14411 (C)14141 (D)14441
4. 656,432, 320, 264, 236,?
(A) 229 (B)232 (C)222 (D)223
5. 3,19,97,391,?,2359
(A) 1177 (B) 1084 (C)1711 (D)1958
6. 2, 7, 24, 77, ?
(A) 1335 (B)249 (C)283 (D)238
7. 11, 5, 13, 10, 15, 15, 17, ?, ?
(A)5, 11 (B)20,19 (C)19,21 (D)19,20
8. 1331,2197,4913,6859,?,24389
(A)13824 (B)9261 (C)12167 (D)15625
9. 97, 86, 99, 88, 101, ?, ?
(A)90, 103 (B)88,99 (C)121,108 (D)114,103
10. 77, 49, 36,18,?
(A) 10 (B)12 (C)8 (D)16

Instruction: In question no. 11 to 20. Figure are given with question mark (?). Complete the figure replacing question mark (?) with suitable number logically.

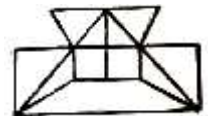
11. How many line segments are there in the given figure?

(A)12 (B)13 (C)14 (D)15



12. How many segments are there in the given figure?

(A)19 (B)18 (C)17 (D)16



13. How many triangles are there in the given figure?

- (A)26 (B)22 (C)18 (D)12



14. How many triangles are there in the given figure?

- (A)28 (B)24 (C)14 (D)10



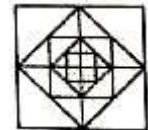
15. How many triangles are there in the given figure?

- (A)29 (B)23 (C)19 (D)None of these



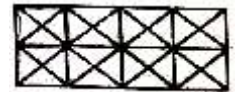
16. How many squares are there in the given figure?

- (A)16 (B)17 (C)12 (D)13

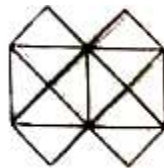


17. How many squares are there in the given figure?

- (A)11 (B)21 (C)24 (D)26



Answer question no. 18 to 20 on the basis of given figure.



18. How many line segments are there in the given figure?

- (A)33 (B)13 (C)36 (D)21

19. How many triangles are there in the given figure?

- (A)12 (B)16 (C)22 (D)24

20. How many squares are there in the given figure?

- (A)5 (B)6 (C)7 (D)8

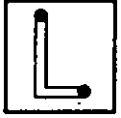







Instruction: In question no. 21 to 30 English alphabets are given digital number/code. Using them, find the correct number/code for given English word by choosing the correct option given below.















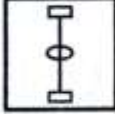
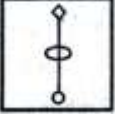












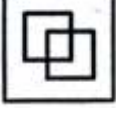

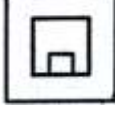

21. B,F,J,N,R,V,Z,D,H,L,?

- (A)M (B)O (C)P (D)T

22. ABC,EFG,JKL,PQ?
 (A)R (B)S (C)T (D)U
23. DD, jjj, PP, vvv, B?
 (A)BB (B)B (C)C (D)OO
24. AHL,?,CFJ,DEI
 (A)BGK (B)BKG (C)GKB (D)GBK
25. R,A,M,E,S,H,H,S,E,M,A,?
 (A)Z (B)Y (C)R (D)W
26. A,C,F,J,O,?,B
 (A)I (B)H (C)U (D)D
27. $\frac{A}{4}, \frac{D}{9}, \frac{H}{15}, \frac{M}{22}, ?$
 (A) $\frac{R}{30}$ (B) $\frac{Q}{31}$ (C) $\frac{Q}{30}$ (D) $\frac{S}{30}$
28. LU__ TUPLUBTU__LUBT__P__UBTUP
 (A)BPUL (B)BUPL (C)LBPU (D)PBUL
29. KM5,IP8, GS11, EV14,?
 (A)BY17 (B)BX17 (C)CY17 (D)GY18
30. ABC, 6, EFG, 210, IJK, ?
 (A)1000 (B)190 (C)999 (D)990

Instruction: Four figures are given in question no. 31 to 40. One of the figure differs from the rest. Find the figure which is differ from others.

31				
	(A)	(B)	(C)	(D)
32				
	(A)	(B)	(C)	(D)

33				
	(A)	(B)	(C)	(D)
34				
	(A)	(B)	(C)	(D)
35				
	(A)	(B)	(C)	(D)
36				
	(A)	(B)	(C)	(D)
37				
	(A)	(B)	(C)	(D)
38				
	(A)	(B)	(C)	(D)
39				
	(A)	(B)	(C)	(D)
40				
	(A)	(B)	(C)	(D)

Instruction: In question no. 41 to 50, English alphabets are given digital number/code. Using them, find the correct digital number/code for given English word by Choosing the correct option given below.

41. If CAT is written ATC in sign language DEAR is written EARD in sign language. Then, how sign will be written in sign language.
(A)INGS (B) NGS I (C)SNGI (D)SGIN
42. If 'no more food' is written ' ta ka da' in sign language and ' more then that' is written 'sa pa ka' then what will be written for 'that ' in the sign.
(A)sa (B)ka (C)sa and pa (D)incomplete information
43. If LAP is written KMZBOQ in sign language then what will be written for NOTE?
(A)MONPSUFD (B) MONPUSDF (C) MNOPSUDE (D) MONPSUFD
44. If E=5 and EMPIRE=66 then what will be written for REPAIR?
(A)66 (B)67 (C)12 (D)13
45. If SSC is written 19193 in sign language then what will be written for BBC?
(A)113 (B)221 (C)223 (D)213
46. If character is written 241612376 and CHILDREN is written 24859670 in sign language, then what will be written for HIRALAL?
(A)481551 (B)4861515 (C)4865151 (D)4681515
47. If APPLE is written ETPL in sign language then what will be written for DELHI?
(A)HIPLM (B)ZAHDE (C)HPILM (D)CQMND
48. If DOCUMENTS is written VDPENRSMD then what will be written for ADVERTISE?
(A)FWEBDSRHS (B) FWBESDRHS (C) FWBESRDHS (D)FWBESFMLD
49. If A=1 and AND=19 then what is for BAT?
(A)22 (B)23 (C)21 (D)20
50. If MEAN is written \$57*, DOME is written 93\$5 then what will be written for MOAN?
(A)3\$7* (B)\$73* (C)\$37* (D)\$*37

Instruction: Four options are given in question no. 51 to 60. One of the options is differ from the rest. Find out that different option.

51. (A)Iron (B)Silver (C)Gold (D)Brass
52. (A)Cotton-tea (B)milk: card (C)Grapes: Wine (D)Bamboo: paper
53. (A)6023 (B)7202 (C)4025 (D)5061
54. (A)Writer (B)Publisher (C)Poet (D)Novelist

55. (A)Violin (B)Sitar (C)Flute (D)Veena
56. (A)Conclusion (B)Research (C)Analysis (D)Investigatio
57. (A)Pathology (B)Biology (C)Cardiology (D)Radiology
58. (A)Sports: Coach (B)Drama: Director (C)Advice: Adviser (D)Student: Teacher
59. (A)Plastic (B)Nylon (C)Silk (D)Polythene
60. (A)Bangkok (B)Jindal (C)Rangoon (D)Kabul

Instruction: Find out the correct mirror image in question no. 61 to 65.

61					
		(A)	(B)	(C)	(D)
62					
		(A)	(B)	(C)	(D)
63					
		(A)	(B)	(C)	(D)
64					
		(A)	(B)	(C)	(D)
65					
		(A)	(B)	(C)	(D)

Instruction: Find out the correct co-relation in question no. 66 to 70.

66. India: Ashok Chakra, France: ?
 (A)Eagle (B)Lily (C)Rose (D)Lotus
67. London: Thames, Delhi: ?
 (A)Yamuna (B)Godavari (C)Krishna (D)Kaveri
68. India: CBI, Pakistan: ?
 (A)NDT (B)ISI (C)CBSE (D)None

69		(A)	(B)	(C)	(D)
70		(A)	(B)	(C)	(D)

Instruction: According to the question, Choose the correct option logically in question no. 71 to 75.

71. (1)Index (2)Contents (3)Title (4)Chapters (5)Introduction
 (A)2,3,4,5,1 (B)3,5,2,4,1 (C)5,1,4,2,3 (D)3,2,5,1,4
72. (1)Embryo (2)Child (3)Baby (4)Middle Aged (5)Young
 (A)1,3,4,5,2 (B)1,3,5,2,4 (C)1,3,2,5,4 (D)1,3,4,2,5
73. (1)Poverty (2)Population (3)death (4)Unemployment (5)Disease
 (A)2,4,1,5,3 (B)1,2,3,4,5 (C)2,3,4,5,1 (D)2,4,5,1,3
74. (1)Accident (2)Judge (3)Doctor (4)Lawyer (5)Police
 (A)1,3,4,2,5 (B)1,3,5,4,2 (C)1,2,3,4,5 (D)1,2,5,4,3
75. (1)Golden Jubilee (2)Silver Jubilee (3)Anniversary (4)Diamond Jubilee (5)Centenary Celebrations
 (A)2,1,3,4,5 (B)2,3,4,5,1 (C)3,1,2,4,5 (D)3,2,1,4,5

Instruction: Follow the instruction and choose the correct option in question no. 76 to 80

76. If x means +, ÷ means x, + means – and – means ÷ then $24+36-12 \times 8 \div 4$?
 (A)36 (B)53 (C)5 (D)-20
77. If ÷ means +, - means x, x means ÷ and + means 0 then $15-8 \times 6 \div 12+4$?
 (A)20 (B) $8\frac{4}{7}$ (C) $2\frac{2}{7}$ (D)28

78. If \div means $+$, $-$ means \times , $+$ means $-$ and \times means \div then $20-16+4\times 3\div 2$?
- (A)12 (B)20 (C) $5\frac{1}{11}$ (D)8
79. If \div means \times , $+$ means \div , $-$ means $+$ and \times means $-$ then $20-16+4\times 3\div 2$?
- (A)16 (B)30 (C)18 (D)24
80. If A means $-$, B means \div , C means $+$, D means \times then $15B3C 24A12D2$ =?
- (A)3 (B)5 (C)7 (D)9

Instruction: Follow the instruction and choose the correct answer from the option. (Que. No. 81 to 100)

81. If third Friday is on 16th of a month then that will be the date of fourth Tuesday of same month?
- (A)20 (B)22 (C)27 (D)29
82. Today is Monday. Which will be the day after 65 Days?
- (A)Wednesday (B)Friday (C)Saturday (D)Sunday
83. 1st January,2000 was Saturday then which day will be there on 1st January,2001.
- (A)Monday (B)Tuesday (C)Friday (D)Saturday
84. Which will be the Leap Year?
- (A)2800 (B)1800 (C)2600 (D)300
85. R is sister of M and M is brother of H. D is mother of K, and K is brother of M then what is the relation between R and D?
- (A)Sister (B)Daughter
(C)Mother (D)Incomplete Information
86. K is brother of T, M is mother of K, W is brother of M then what is the relation between W and T?
- (A)maternal Uncle (B)Grand Father (C)Paternal Uncle (D)None of these
87. Mohan pointing his finger to a photo, and said that " the only child of his mother is the only son of my father." Then whose photo is Mohan Pointing?
- (A)Brother (B)Himself (C)Paternal Cousin (D)Maternal Cousin
88. What will be my relation with the daughter of my paternal aunt's father's son?
- (A) Paternal Aunt (B)Sister
(C)Niece(Brother's Daughter) (D) Niece(Sister's Daughter)
89. X and Y are brothers. R is father of Y. S is brother of T and maternal uncle of X. Then what is the relation of T and R.
- (A)Wife (B)Mother (C)Sister (D)Brother
90. A clock is kept in a way that at 12 o'clock its minute hand is in north east direction. Then what will be the direction of hour hand 1:30 ?
- (A)North (B)South (C)East (D)West

91. If south east is north and north east is west and goes ahead in same direction then what will be the direction of west?
 (A)South West (B)North East (C)South East (D)North West
92. A train runs 120 km in the west, then it runs 30 km in the south and 80 km in the east again before reaching the station, in which direction the station will be from the starting point of the train?
 (A)South East (B)North west (C)South (D)South West
93. Ram stands out towards the north. He walks directly (straight) 10 km. Then he turns left and walks 15km and turns left and walks 10 km. Then how far is he from the starting point?
 (A)10km (B)5 km (C)12km (D)15 km
94. A man walks 3 km north from his house. Then turns left and walks 2 km. Then turns right an walks km. At least he turns right and walks 5 km. How far is he from his house?
 (A)3km (B)6km (C)4 km (D)5 km
95. Nitin walks 14 m west then he goes 3 km south. Afterwards he walks 10 km towards east. How far is he from his starting point?
 (A)5 km (B)12 km (C)15 km (D)10 Km
96. Proportion ratio of the age of A & B is 3:2 today. After 5 years it will be 8:7. What is the sum of the age og both?
 (A)8 years (B)5 years (C)10 years (D)none of these
97. Sum of lucky & Suman age is 35 years today. Proportion ratio will be 4:5 after 5 years. What is the age difference between them now?
 (A)3 years (B)6 years (C)5 years (D)4 years
98. Father's age is 8 years plus of thrice son's age. Mother's age is 3 years more than father's age. If son's age is 7 years then what is the age of mother?
 (A)26 year (B)29 year (C)32 year (D)35 year
99. There are 3 red 5 yellow and 4 green balks in a box, if 3 balls are randomly taken from the box. Then what is the probability of taken balls?
 (A)120 (B)220 (C)320 (D)420
100. If 16 persons shake hands in a party then what will be the total number of shaking hands be combined?
 (A)120 (B)256 (C)110 (D)100