# MADHYA PRADESH NTSE (PART-I) MENTAL ABI LITY 

Time: 120 MINUTES
Maximum Marks: 100

Direction : In question No. 1 to 10, there is a missing number in series shown by question mark (?). Choose the correct number out of the four alternatives given.

1. $10,100,200,310$,?
(A) 400
(B) 410
(A) 420
(B) 430
2. $6,12,21, ?, 48$
(A) 33
(B) 38
(C) 40
(D) 45
3. $3,7,15, ?, 63,127$
(A) 35
(B) 31
(C) 30
(D) 33
4. $196,169,144,121$, ?
(A) 100
(B) 110
(C) 64
(D) 81
5. $25,49,81, ?, 169,225$
(A) 100
(B) 121
(C) 144
(D) 125
6. $325,259,204,160, ?, 105,94$
(A) 120
(B) 125
(C) 127
(D) 130
7. $165,195,255,285,345$, ?
(A) 375
(B) 390
(C) 420
(D) 435
8. $1,3,4,8,15,27$, ?
(A) 37
(B) 44
(C) 50
(D) 55
9. $6,11,21,36,56$, ?
(A) 42
(B) 51
(C) 81
(D) 91
10. $3,15, ?, 63,99,143$
(A) 27
(B) 35
(C) 45
(D) 56
11. If 'ROHIT' is coded as 'SPIJU', how will 'MOHIT' be coded?
(A) NPIJU
(B) LNGHS
(C) ZATIU
(D) None of the above
12. If 'MEAT' is coded as '135120', how will 'TIME' be coded?
(A) 209135
(B) 211395
(C) 26245
(D) None of the above
13. In a certain code, 'ROAD' is written as 'URDG'. How is 'SWAN' written in that code?
(A) VXDQ
(C) VZDQ
(B) VZCP
(D) UXDQ
14. If each letter in the English alphabet is assigned odd Numerical value beginning $A=1, B=3, C=5$ \& so on. What will be the value of the letters of word INDIAN?
(A) 86
(B) 88
(C) 89
(D) 96
15. In a certain language 'LUTE' is written as 'MUTE' \&'FATE' is written as 'GATE', then how will 'BLUE' be written?
(A) CLUE
(B) GLUE
(C) FLUE
(D) SLUE

Direction : In question No. 16 to 20, of the four given alternatives, find the odd one out.
16.
(A) Fast - Slow
(B) Bright- Dark
(C) Day- Night
(D) Valley-Depth
17.
(A) Zebra
(B) Lion
(C) Tiger
(D) Horse
18.
(A) January
(B) May
(C) November
(D) July
19.
(A) Radish
(B) Carrot
(C) Spinach
(D) Potatoes
20.
(A) 333
(B) 153
(C) 783
(D) 213
21. If 'cook' is called 'butler','butler' is 'manager', 'manager' is 'teacher', 'teacher' is 'clerk' \& 'clerk' is 'principal', who will teach in a class?
(A) Clerk
(B) Cook
(C) Butler
(D) Manager
22. If 'Black' means Pink, 'Pink' means 'Blue' 'Blue' means 'White', 'White' means 'Yellow', then what is the colour of clear sky?
(A) Brown
(B) Pink
(C) Red
(D) Blue

Direction: In question No. 23 to 35, one of the four alternatives given under the each question satisfies the same relation as is found between two patterns to the left of the sign : : given in the question. Find the correct alternative.
23. Virat Kohli :Cricket : : Marykom : ?
(A) Boxing
(B) Badminton
(C) Cricket
(D) Tennis
24. $81: 3:: 16: ?$
(A) 2
(B) 4
(C) 9
(D) 12
25. Aeroplane : Hanger : : Car : ?
(A) Port
(B) Garage
(C) Depot
(D) Harbour
26. Bees : Swarm : : Cattle : ?
(A) Mob
(B) Flock
(C) Herd
(D) Shoal
27. Rupee : India : : Yen : ?
(A) Turkey
(B) Bangladesh
(C) Japan
(D) Pakistan
28. Air : Atmosphere : : Water : ?
(A) Hydrosphere
(B) Ecosphere
(C) Biosphere
(D) Stratosphere
29. Mumbai : Maharashtra : : Raipur : ?
(A) Gujarat
(B) Kerala
(C) Chhattisgarh
(D) Jharkhand
30. Ship : Sea : : Camel : ?
(A) Forest
(B) Mountain
(C) Land
(D) Desert
31. Thermometer : Temperature : : Barometer : ?
(A) Pressure
(B) Humidity
(C) Electric current
(D) Earthquake Intensity
32. Dog : Rabbies : : Mosquito:?
(A) Sting
(B) Malaria
(C) Death
(D) Plague
33. Tuberculosis : Lungs : : Cataract : ?
(A) Ear
(B) Throat
(C) Eyes
(D) Skin
34. $A B: Z Y:: C D: ?$
(A) XW
(B) WV
(C) $X Y$
(D) $W X$
35. Cruel : Kind: : Lazy: ?
(A) Alert
(B) Sharp
(C) Interest
(D) Shrewd

Direction : Four types of figures (a), (b), (c) \& (d) are given for question No. 36 to 39 . One of the figure type represents the relation of 3 types of things. Select the right answer.

(a)

(b)

(c)

(d)
36. Bus ; Car ; Vehicle
(A) a
(B) b
(C) c
(D) d
37. Week, Day, Year
(A) a
(B) $b$
(C) c
(D) d
38. Thief, Criminal, Judge
(A) a
(B) $b$
(C) c
(D) d
39. Professor, Researcher, Scientist
(A) a
(B) $b$
(C) c
(D) d
40. Which number is in all Geometrical figures?

(A) 3
(B) 4
(C) 5
(D) 8
41. Rohit travels 7 km to the North. He then turns right and walks 4 km . He again turns right \& moves 4 km forward. How many km is he from the starting point.
(A) 6 km
(B) 5 km
(C) 9 km
(D) 15 km
42. Pointing to a man, a woman said, "He is the son of only son of my grandfather". How is that man related to woman?
(A) Uncle
(B) Brother
(C) Cousin
(D) None of these
43. What is the product of all the Numbers in the Dial of a Telephone?
(A) 158480
(B) 0
(C) 159450
(D) 159480
44. If $\div$ 'means ' $\times{ }^{\prime}, ' \times$ ' means ' + ',' + ' means ' ' and ' ' means ' $\div$ 'find the value of $16 \times 3+5-2 \div 4$.
(A) 9
(B) 10
(C) 19
(D) None of these
45. If ' <' means ' - ',' >' means '+'and ' $\$$ ' means ' $\div$ ', then what would be the value of $27>81 \$ 9<6$ ?
(A) 6
(B) 33
(C) 36
(D) 30
46. If the seventh $\left(7^{\text {th }}\right)$ day of the month is Tuesday, what day will it beonthe19 ${ }^{\text {th }}$ day of the month?
(A) Sunday
(B) Monday
(C) Wednesday
(D) Friday
47. Rohan ranks $7^{\text {th }}$ from the top and $26^{\text {th }}$ from the bottom in a class. How many students are there in the class?
(A) 31
(B) 32
(C) 33
(D) 34
48. In the following Number series, how many alphabets are written twice, consecutively?

GOSSRGMLGTOPQQRPPSOG
(A) 3
(B) 5
(C) 1
(D) 2
49. You go North, turn right, then turn right again and then go to the left. In which direction you are now.
(A) North
(B) South
(C) East
(D) West
50. In the following four words. Which word will come third in the English dictionary?
(A) Fallible
(B) Faithfully
(C) False
(D) Follow
51. Which of the following words will come third in English dictionary?
(A) Magnify
(B) Magnetic
(C) Magical
(D) Martial
52. $66 \times 83=8636$
$56 \times 73=7635$
$46 \times 63=6634$
$36 \times 53=$ ?
(A) 5633
(B) 5643
(C) 5655
(D) 5663
53. If $9-3-1=913,6-5-4=645$, then $8-7-0=$ ?
(A) 708
(B) 780
(C) 807
(D) 804
54. On substracting 9 from this number, its digits are reversed. Point out the number.
(A) 36
(B) 45
(C) 54
(D) 27
55. How many 4's are there in the series below which are preceded by 8 and followed by 0 . 840480480480840804804840804.
(A) 2
(B) 3
(C) 4
(D) 5
56. Anathleteruns 10 km in 30 min . Then his speed in $\mathrm{km} / \mathrm{his}$
(A) $25 \mathrm{~km} / \mathrm{h}$
(B) $20 \mathrm{~km} / \mathrm{h}$
(C) $30 \mathrm{~km} / \mathrm{h}$
(D) $10 \mathrm{~km} / \mathrm{h}$
57. A and $B$ together can do a piece of work in 6 days $A$ alone can do it in 9 days. In how many days can $B$ alone do it?
(A) 18
(B) 14
(C) 16
(D) 20
58. It's 3 O' clock in a wrist watch. If the minute hand points towards North-East direction, then the hour hand will point towards which direction?
(A) South - West
(B) North West
(C) South
(D) South - East

Direction : [Q. 59 - 62] In a certain code, 'ca na da' means. 'how are you; 'ta na co' means 'we are happy'; 'ta po da' means 'we and you'
59. What is the code for 'happy'?
(A) ca
(B) co
(C) po
(D) na
60. What is the code for how ?
(A) ca
(B) ta
(C) po
(D) co
61. What is the code for 'you are happy'?
(A) ca co na
(B) ta na co
(C) po ca da
(D) da na co
62. 'how you happy will be coded as?
(A) po ca da
(B) ca da co
(C) na da na
(D) co ca po

Direction : [Q. 6364$]$ Find the missing numerical value in following questions.
63.

6

(A) 26
(B) 25
(C) 24
(D) 38
64.

(A) 5
(B) 4
(C) 3
(D) 2
65. Arrange the following events in the order as they occur to form meaningful sequence.

1. Consultation, 2. Illness, 3. Treatment, 4. Recovery
(A) 2, 1, 3, 4
(B) $3,2,1,4$
(C) $1,2,3,4$
(D) $3,1,2,4$
2. In a certain code, 'FISH' is written 'EHRG', how will 'JUNGLE' be written in that code?
(A) ITNFKD
(B) ITMFKD
(C) KMFKD
(D) TIMFKD
3. If ' A ' denotes ' + ', ' $B$ ' denotes ' $C$ ' denotes ' $D$ ' denotes then

5 A 14 B 2 D 2 C 2 = ?
(A) 20
(B) 17
(C) 19
(D) 16
68. If $9 * 4=169$, then what is the value of $14 * 1$ ?
(A) 144
(B) 169
(C) 125
(D) 225
69. Divide Rs. 640 among A, B \& C so that $A$ have $30 \%$, B have $45 \%$ \& $C$ have the rest. How much the $C$ have?
(A) 160
(B) 232
(C) 212
(D) 200
70. ' $A$ ' is 3 years older than ' $B$ ' and 3 years younger to ' $C$ ', while ' $B$ ' \& ' $D$ ' are twins. How many years is $C$ older than D.
(A) 06
(B) 07
(C) 05
(D) 04

## Direction : [Q.71-72] Arrange the given words as they occur in the dictionary.

71. (1) Inward, (2) Ion, (3) lodine, (4) Invite, (5) Iodoform.
(A) (4), (1), (2), (5), (3)
(B) (4), (1), (3), (5), (2)
(C) (1), (3), (2), (4), (5)
(D) (5), (4), (1), (2), (3)
72. 

(1) Matter (2) Meal (3) Maze (4) Maximum (5) Mean
(A) (2), (3), (5), (4), (1)
(B) (1), (4), (2), (5), (3)
(C) (1), (4), (3), (2), (5)
(D) (4), (1), (3), (2), (5)
73. If the digits of number 6492758 are written in ascending order, then how many digits will remain unchanged.
(A) one
(B) two
(C) none
(D) three

Direction : [Q.74-78] Study the figure \& answer the question given below.

74. Which letter represents the Artists who are doctors and dancers only.
(A) A
(B) D
(C) $G$
(D) H
75. Which letter represents the Artists who are neither scientists nor doctors?
(A) A and B
(B) A and L
(C) B and G
(D) L and H
76. Which letter represents the Artists who are dancers as well as doctors only.
(A) A and D
(B) C and G
(C) C and D
(D) G and H
77. Which letter represents the Artists who are neither doctors nor scientists nor dancers?
(A) A
(B) D
(C) F
(D) $G$
78. Which letter represents the scientists only.
(A) B
(B) D
(C) F
(D) L
79. A class of boys stands in a single line. One boy is nineteenth in order from both the ends. How many boys are there in the class.
(A) 27
(B) 37
(C) 38
(D) 39
80. In the following series, how many pairs of successive numbers have a difference of 2 each? 64122874215386217141
(A) Four
(B) Five
(C) Six
(D) Seven

Direction : [Q. No . 81 -90] Choose the odd figure out of the given.
81.
(>ノ
(A)
(B)
(C)
(D)
82.

(A)
(B)
(C)
(D)
83.

(A)
(B)
(C)
(D)
84.

85.

86.

(A)
(B)
(C)
(D)
87.

88.

(A)
(B)
(C)
(D)
89.

(A)
(B)
(C)
(D)
90.

(A)
(B)
(C)
(D)

Direction : [Q.No. 91 to 95 ] Study the following information and answer the given questions.
i) $\quad B$ and $E$ are good in Dramatics \& Computer Science
ii) $\quad A$ and $B$ are good in Computer Sc. and Physics.
iii) A, D and C are good in Physics and History.
iv) $\quad$ C and A are good in Physics \& Mathematics
v) $\quad D$ and $E$ are good in History and Dramatics
91. Who is good in Physics, History \& Dramatics?
(A) A
(B) B
(C) D
(D) E
92. Who is good in Physics, History \& Mathematics, but not in Computer Science?
(A) $A$
(B) B
(C) C
(D) $D$
93. Who is good in Computer Science, History and Dramatics?
(A) A
(B) B
(C) C
(D) E
94. Who is good in History, Physics, Computer Science and Mathematics?
(A) A
(B) B
(C) C
(D) D
95. Who is good in Physics, Dramatics \& Computer Science?
(A) A
(B) B
(C) D
(D) E

## Direction : [Q. No. 96 to 98] Find the missing number from among the given alternatives.

96. 

Cles,
(A) 1440
(B) 2880
(C) 860
(D) 1140
97.

(A) 310
(B) 320
(C) 330
(D) 300
98.

(A) 3
(B) 6
(C) 18
(D) 2

Direction : [Q. No. 99-100] In each of the following questions; find out which of the answer figure complete the matrix.
99. Question Figure


Answer Figure

(A)
(B)
(C)
(D)
100. Question Figure


Answer Figure

(A)
(B)
(C)
(D)

