# NATIONAL TALENT SEARCH EXAMINATION (NTSE-2015-16) STAGE -1 GUJARAT <br> MAT 

Max. Marks: 50
Time allowed: 45 mins

In che following questions 1 to 10 questions numbers are arranged in a series with come principles understanding it. One term in the series is missing as shown by $\qquad$ . This term is given as one of the alternative amongst the four numbers given below it. Find this term and show your answer against the question number on the anwer sheet.

1. $1,12,18,25$, $\qquad$ , 52
(1) 32
(2) 33
(3) 35
(4) 34
2. $9,16,25,36$, $\qquad$ , 64, 81
(1) 40
(2) 42
(3) 46
(4) 49
3. $2,2,4,12,48$, $\qquad$ .
(1) 240
(2) 220
(3) 192
(4) 200
4. $25,22,18,13,7$, $\qquad$ -.
(1) 1
(2) 2
(3) 3
(4) 0
5. $8,27,64,125$, $\qquad$ , 343, 512
(1) 150
(2) 220
(3) 216
(4) 180
6. $48,35,24$, $\qquad$ , 8, 3.
(1) 14
(2) 15
(3) 16
(4) 12
7. $12,20,30,42$, $\qquad$ 72
(1) 14
(2) 15
(3) 16
(4) 12
8. $17,22,26,29$, $\qquad$ 32, 32
(1) 30
(2) 31
(3) 32
(4) 29
9. $144,100,64$, $\qquad$ 16, 4
(1) 32
(2) 34
(3) 36
(4) 40
10. $22,33,46$, $\qquad$ 78, 97
(1) 60
(2) 61
(3) 62
(4) 67

In question 11 to 15, English alphabates are given digital numbers. Using them, find the correct code of other English words from the alternatives.
11. If TAKE $=3456, \mathrm{KAML}=5479$ are given, what is writeen for MAKE
(1) 7465
(2) 7456
(3) 7546
(4) 7564
12. If $\mathrm{DOG}=467, \mathrm{CAT}=321$ are given, what is written for GOT ?
(1) 716
(2) 761
(3) 671
(4) 617
13. If $A=1, B=2, C=3, D=4, E=5, F=6, G=7, H=8, I=9$ and $B C G H=2378$ are given, what is given to $\mathrm{CDHI}=$ ?
(1) 3498
(2) 3849
(3) 3489
(4) 3894
14. If $\mathrm{CAMEL}=34567$, $\mathrm{METAL}=56847$, what is LEMAT ?
(1) 76584
(2) 76458
(3) 76548
(4) 76854
15. If $\mathrm{HIDE}=8945, \mathrm{BDAF}=2416$, what is DIBF?
(1) 4962
(2) 4692
(3) 4296
(4) 4926

In question No. 16 to 20, if order of English alphabet is changed, code language id changed.
16. If POUND is written instead of DNUOP, what is written for MEGIK ?
(1) KIMEG
(2) KIGEM
(3) KGIEM
(4) KIGEM
17. If REWOL is written for FLOWER, what is written for MARKET?
(1) TEKRMA
(2) TEKRAM
(3) TEKAMR
(4) TEKMAR
18. If PCAT $=$ TACP and RBED $=$ DEBR are written, what is written for DCAB in code language?
(1) BACD
(2) $A B C D$
(3) BADC
(4) ABDC
19. If $A B C D$ is written $Z Y X W$ in code language, what is written for EFGHin code language?
(1) VUST
(2) UTSR
(3) STUV
(4) VUTS
20. If in any language ROAST by PQYUR, how is expressed SLOPPY ?
(1) MRNAQN
(2) NRMNQA
(3) QNMRNA
(4) RANNMQ

In question No. 21 to 25, four figures are given in each. One of the figure differs from the rest three Which is that figure?
21. (1)

(2)

(3)

(4)

22.
(1)

(2)

(3)


23.
(1)

(2)

(3)



24.
(1)

(2)

(3)



25. (1)

(2)

(3)

(4)


In question No 26 to 30, figures are given with one question mark (?). Complete the figure logically.
26.

(1) 72
(2) 35
(3) 56
(4) 42
27.

| 6 | 11 | 4 |
| ---: | ---: | ---: |
| 5 | $?$ | 9 |
| 10 | 3 | 8 |

(1) 2
(2) 1
(3) 7
(4) 12
28.

(1) 34
(2) 35
(3) 30
(4) 36
29.

(1) 62
(2) 63
(3) 106
(4) 76
30.

(1) 65
(2) 60
(3) 61
(4) 62
31.


In figure, if at the bottom of the quibic, there are four dots, how many dots can be at the top?
(1) 2
(2) 4
(3) 6
(4) 3
32. Pointing at the photo, Ramesh said that is the photo of the younger brother of father's daughter's of the only sister of my maternal uncle. What relation of the person in the photo with Ramesh?
(1) Maternal uncle
(2) Father
(3) Uncle
(4) Brother
33. Tarun went 8 kms in the East from his house. Then turned to left and went to the temple which is 4 kms away. Now to reach his home (without taking turn)) how much distance would he walk?
(1) $5(\mathrm{~km})$
(2) $3(\mathrm{~km})$
(3) $8(\mathrm{~km})$
(4) $6(\mathrm{~km})$
34. Kiran was standing on the way after sunrise. Narmrata who was coming from the opposite direction, saw that the shadow od Kiran was falling on his left. So to which direction was Kiran's face? (Kiran was looking)
(1) South
(2) South-West
(3) North-West
(4) North
35. A wall-clock shows $3: 40$ time. What time is indicated reflection of the same clocl on the opposite clock?
(1) $7: 20$
(2) $8: 40$
(3) $8: 20$
(4) $7: 40$
36. 2 mangoes $=3$ apples, 2 apples $=4$ bananas. So instead of buying 3 mangoes, hoe many bananas are available?
(1) 6 bananas
(2) 8 bananas
(3) 9 bananas
(4) 12 bananas
37. If on 27 January 1947, it was Wednesday, what day was on 3 September 1947?
(1) Wednesday
(2) Thursday
(3) Friday
(4) Sunday
38. Goldmith : Ornamentsi :: Producer : ?
(1) Film
(2) Theater
(3) Actor
(4) Actress
39. Satish was born on $15^{\text {th }}$ August. If Mahesh is 17 years old er than Satish. On which day was Mahesh born?
(1) Tuesday
(2) Monday
(3) Wednesday
(4) Monday
40. At 3.00 o'clock, which of the following angle is made the two hands (hour hand and minute hand) ?
(1) $90^{\circ}$
(2) $120^{\circ}$
(3) $0^{\circ}$
(4) $150^{\circ}$
41. What would be the measurement between two hands (hour hand and minute hand) at 10.00 o'clock ?
(1) $30^{\circ}$
(2) $60^{\circ}$
(3) $90^{\circ}$
(4) $120^{\circ}$
42. If the day before yesterday was Sunday, what day will be on the $5^{\text {th }}$ day after day after tomorrow?
(1) Sunday
(2) Saturday
(3) Wednesday
(4) Thursday

In question No. 43, 44 and 15, one word differs from the rest. Which one is that?
43.
(1) Acre
(2) Inch
(3) Meter
(4) Mile
44. (1) Banas
(2) Saraswati
(3) Rupen
(4) Sabarmati
45. Three cities of the following are of one group. Which city differs from that group?
(1) Ahmedabad
(2) Jaypur
(3) Bhopal
(4) Lucknow
46. There is relation between Gujarat and Gandhinagar. Which of the following words has the same type of relation with Asham?
(1) Gauhati
(2) Manipur
(3) Dispur
(4) Mizoram
47. In a line, Parth's sequence is $17^{\text {th }}$ from right side and $24^{\text {th }}$ from the left side. So how many students are there in that line?
(1) 41
(2) 40
(3) 42
(4) 39
$\stackrel{\longrightarrow}{20 \% \text { of } 20 \% \text { of a number is } 20 \text {. What is that number? }}$
(1) 200
(2) 400
(3) 500
(4) 2000
49. If 'City' is called 'Village', 'Village' is called 'Sofa' and 'Sofa' is 'Bathroom', than where does lion live?
(1) ina Jungle
(2) In a Sofa
(3) In a bathroom
(4) In a village
50. The addition of the squares of two numbers in squares is 221 . Which are those numbers?
(1) 100 and 111
(2) 9 and 10
(3) 10 and 11
(4) 11 and 12

