(Talent & Olympiad Question)

Large Numbers

Multiple Choice Questions

1. With which place does a 7-digit number start in the Indian system?

(a) Lakhs (b) Ten thousands

(c) Ten lakhs (d) Crores

2. Identify the place with which an 8-digit number starts in the International system.

(a) Millions (b) Ten millions

(c) Hundred thousands (d) Lakhs

3. Find the place value of 0 in 36, 04, 85, 298.

(a) Ten lakhs (b) Lakhs

(c) Zero (d) 6 crores

4. Find the sum of the greatest 8-digit number and the smallest 9 – digit number.

(a) 1, 99, 99, 999 (b) 19, 99, 99, 999

(c) 99, 99, 99, 999 (d) 1, 00, 00, 999

5. What is the difference of the greatest 7 – digit number and the smallest 5 digit number?

(a) 9, 98, 999 (b) 99, 89, 999

(c) 99, 899 (d) 9, 98, 099

6. By how many times do the place values of the digits increase from right to left in a number?

(a) 100 (b) $\frac{1}{10}$

(c) 10 (d) 1000

7. How many crores is 10 million?

(a) 10 (b) 1

(c) 10 (d) 100

8. How many zeroes follow 1 in the numeral for 10 millions?

(a) 8 (b) 7

(c) 6 (d) 9

9. Identify the number name for 123, 080, 603.

(a) One two three eighty thousand six hundred three.

(b) One hundred twenty three million eight thousand six hundred three.

(c) One hundred twenty three million eighty thousand six hundred three.

(d) One twenty three million eighty thousand six hundred.

10. Identify the equivalent of 10 crores from the following.

(a) 10 millions (b) 100 millions

(c) 1 million (d) 1000 millions

11. Observe the following.

6, 73, 89, 145 ☐ 67, 38, 91, 450

Identify the missing symbol.

(a) <

(b) >

(c) =

(d) Either (b) and (c)

12. What is the missing digit in 3 ☐ 6013 if 3 ☐ $6013 = 300000 + 70000 + 6000 + 0 + 10 + 3$?

(a) 3

(b) 6

(c) 1

(d) 7

13. In 189485, how many times the value of 8 in the tens place is the value of 8 in the ten thousands place?

(a) 10 (b) 1000

(c) 100 (d) 10000

14. Which of the following is the best estimate of the product 5842×49?

(a) 250000 (b) 292000

(c) 290000 (d) 300000

15. Identify the smallest 7-digit number.

(a) 10, 00, 000

(b) 1 + greatest 6 digit number

(c) Both (a) and (b)

(d) Neither (a) or (b)

16. What is the difference between the place value and face value of 5 in 91, 25, 678?

(a) 4995 (b) 0

(c) 4095 (d) 5000

17. Study the following equation.

$$792 \times 650 = 800 \times 650 - \square \times \square$$

What is the value of the product of the missing numbers?

(a) 520 (b) 5020

(c) 5200 (d) 8650

18. What is the difference between the smallest 6-digit odd number and the largest 4-digit even number?

(a) 90002

(b) 90003

(c) 101113

(d) 101121

19. For which digit is the place value and face value always the same?

(a) 0 (b) 10

(c) Any digit (d) 100

20. Find the numeral for sixty million and sixty six.

(a) 60, 000, 060 (b) 60, 000, 066

(c) 6, 000, 066 (d) 600, 000, 060

21. Which of the following numbers has the greatest value for digit 5?

(a) 80503 (b) 5098

(c) 146857 (d) 7653231

22. The digits 6, 0, 3, 7, 6 and 9 are arranged to form the greatest possible 6 – digit odd number. Find the difference in value of the two digits 6.

(a) 5400 (b) 540

(c) 54600 (d) 54000

23. Which of the following is equal to 75×100?

(a) $75 \times 20 \times 5$ (b) $70 + 5 \times 100$

(c) $75 \times 10 + 90$ (d) $(75 \times 20) + (75 \times 5)$

24. The odometer of a car shows 9232 *km*. How many thousand kilometres is the reading?

(a) 10 (b) 8

(c) 11 (d) 9

25. Find the value of 100 ten thousands 65 thousands 50 hundreds 2 ones?

(a) 10, 07, 002

(b) 10, 70, 002

(c) 10, 65, 502

(d) 1, 00, 70, 002

26. For how many hundreds does the digit 9 stand in the product of 255 and 37?

(a) 9000 (b) 90

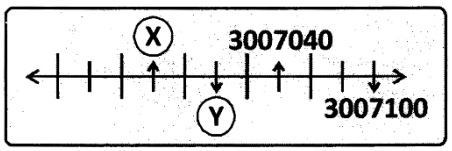
(c) 90000 (d) 9

27. What is the largest possible whole number which results in 223000 when a number is rounded off to the nearest thousand?

(a) 223499 (b) 223001

(c) 223500 (d) 223100

28. Observe the number line given.



What is the difference of X and Y?

(a) 4060 (b) 400

(c) 4040 (d) 40

29. How many hundreds must be added to 30 thousands to get 1 million?

(a) 97 (b) 9700

(c) 97000 (d) 970000

30. What is the sum of the values of the digit '8' in 438498?

(a) 16 (b) 88

(c) 808 (d) 8008

31. M is the largest number which when rounded off to the nearest hundreds gives 63500. N is the smallest number which when rounded off to the nearest thousands gives 150000. What is the sum of M and N?

(a) 202049 (b) 231409

(c) 213049 (d) 213490

32. Find the number which is divisible by 2.

(a) 7907 (b) 63195

(c) 72028 (d) 213490

33. By which two numbers must a number be divisible so that it is divisible by 6?

(a) 4 and 3 (b) 2 and 4

(c) 2 and 3 (d) 3 and 5

34. What is the smallest possible 5 – digit even number that can be formed using all the digits in the sum of 82349 and 8268?

(a) 10769 (b) 16790

(c) 10796 (d) 19706

35. Which of the following is the number obtained by rounding 178762 to the nearest hundreds?

(a) 178760 (b) 178800

(c) 178700 (d) 17800

36. Identify the number obtained by rounding 38, 65, 62, 048 to the nearest lakhs.

(a) 386860000 (b) 3865600

(c) 386500000 (d) 386600000

37. The difference of two numbers is 174325. If the greater number is 8765432, what is the smaller number?

(a) 8590107 (b) 8591107

(c) 8592107 (d) 8519107

38. In a school, there are a total of 2476 students and teachers. The total number of teachers and boys is 1289. The total number of girls and teachers is 1246. How many teachers are there in the school?

(a) 80 (b) 70

(c) 65 (d) 59

39. Some Roman numerals are given in the box.

I C L M D

Which of the following is the number that can be written using all the given Roman numerals?

(a) 1775 (b) 864

(c) 1947 (d) 1753

40. Study the Hindu-Arabic equivalents of the given Roman numbers.

(i) DCLV = 655
(ii) XLVI = 46
(iii) MDCL = 1560

Which of the following is/are correct?

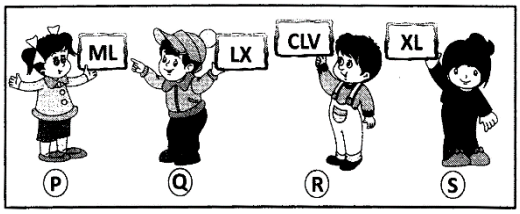
(a) Only (i) and (ii)

(b) Only (ii) and (iii)

(c) Only (i) and (iii)

(d) Only (i)

41. Observe the given figure.



Who has the largest number?

(a) *R* (b) *Q*

(c) *P* (d) *S*

42. How many match sticks are needed to make the Roman numerals equivalent to 29 ?

(a) 6 (b) 7

(c) 9 (d) 10

43. Find the Roman numeral for 1618 .

(a) *MDCXVIII* (b) *MDCLXVI*

(c) *MCDXVIII* (d) *MDCLXVIII*

44. Which of these numbers has the least value?

(a) *CDCX* (b) *CDXL*

(c) *DCLX* (d) *DCXL*

45. What is the order in which numerical expressions are to be evaluated?

(a) *M*, *A*, *S*, *D* (b) *D*, *S*, *M*, *A*

(c) *D*, *A*, *S*, *M* (d) *D*, *M*, *A*, *S*

46. What is the resultant of the given expression?

$$30 \times 8 \div 2 + 62 - 24$$

(a) 168 (b) 158

(c) 185 (d) 142

47. Identify the missing term in the equation.

$$909000 \div 9090 = 159 - \boxed{?}$$

(a) 159 (b) 100

(c) 59 (d) 95

48. How is the expression $100 - 7 \times 1 + 5$ written using brackets?

(a) $(100 - 7) \times (1 + 5)$

(b) $(100 - 7) \times 1 + 5$

(c) $100 - 7 \times (1 + 5)$

(d) $100 - (7 \times 1) + 5$

Answer with Explanation

1. (c)

7	6	5	4	3	2	1
T.L	*L*	*T.Th*	*Th*	*H*	*T*	*O*

2. (b)

8	7	6	5	4	3	2	1
TM	*M*	*H.Th*	*T.Th*	*Th*	*H*	*T*	*O*

3. (c) The place value of 0 in any place in a number is zero.

4. (d) Their sum $= 100000000 + 99999999$
$= 199999999$

5. (b) The required difference

$$\begin{array}{r} 9999999 \\ -10000 \\ \hline 9989999 \end{array}$$

6. (c) The place values of the digits increase by 10 times from right to left in a number.

7. (b)

Indian system	C	TL	L	T.Th	Th	H	T	O
International system	TM	M	H.Th	T.Th	Th	H	T	O

Hence, 10 million = 1 crores.

8. (b)

9. (c)

10. (b)

11. (a)

12. (d) The missing digit according to the given expansion is 7 .

13. (b) The value of 8 in the ten thousands place is
$80000 = 80 \times 1000$
$= 1000$ times the value of 8 in the tens place

14. (c) $5842 \times 49 \approx 5800 \times 50 = 290000$

15. (c) The smallest 7- digit number is 10, 00, 000
= The successor of the greatest 6 – digit number
= The greatest 6- digit number +1

16. (a) The place value of 5 in 9125678 is 5000 .
Its face value is 5 . Thus, the required difference $= 5000 - 5 = 4995$.

17. (c) $792 \times 650 = (800 - 8) \times 650$
$= 800 \times 650 - \mathbf{8 \times 650}$
$\therefore$ The value of the product of the missing numbers is $8 \times 650 = 5200$.

18. (c) The smallest 6- digit odd number
$= 100001$
The largest 4-digit even number $= 9998$
Their difference $= 100001 - 9998$
$= 90003$

19. (a)

20. (b)

21. (d)

22. (a) The greatest 6- digit odd number that can be formed using 6, 0, 3, 7, 6 and 9 is 976603 .
The difference in place values of the two 6's in 976603 is $6000 - 600 = 5400$.

23. (a) $75 \times 100 = 75 \times 20 \times 5$

24. (d) 9232 *km* rounded to the nearest 1000 is 9000 *km*. Thus the reading of the odometer is 9 thousand kilometres.

25. (b) 100 ten thousands $= 100 \times 10000$
$= 1000000$
65 thousands $= 65000$
50 hundreds $= 5000$
2 ones $= 2$
$\therefore$ The required value is $1000000 + 65000 + 5000 + 2 = 1070002$.

26. (b) The product of 255 and 37 is
$255 \times 37 = 9435$
The place value of 9 in 9435 is 9000
$= 90 \times 100$
Thus, 9 stands for 90 hundreds.

27. (a) The numbers that result in 223000 when a rounded off to the nearest thousand are 222500 to 223499. The largest among them is 223499.

28. (d) From the given number line, the difference between every two consecutive markings is 20.
So, $X = 3006960$ and $Y = 3007000$.
Therefore, the required difference is $Y - X = 3007000 - 3006960 = 40$.

29. (b) 1 million $= 1,000,000$
30 thousands $= 30,000$
The required number
$= 1,000,000 - 30,000$
$= 970,000$
$= 9700 \times 100$
9700 hundreds must be added to 30 thousands to get 1 million.

30. (d)

L	*T.Th*	*Th*	*H*	*T*	*O*
4	3	8	4	9	8

The sum of the values of 8 in 438498 is $8000 + 8 = 8008$.

31. (c) According to the problem,
$M = 63549$ and $N = 149500$.
Their sum $= 63549 + 149500 = 213049$

32. (c)

33. (c)

34. (c)

35. (b) In 178762, the digit in tens place is $6 > 5$. So, 178762 rounded to the nearest hundreds is 178800.

36. (d) 38,65,62,048
The digit in ten thousands place is $6 > 5$.
So, 38,65,62,048 rounded to the nearest lakhs is 38,66,00,000.

37. (b) The required smaller number
$= 8765432 - 174325 = 8591107$

38. (d) Total number of students and teachers $= 2476$
No. of teachers and boys $= 1289$
$\therefore$ No. of girls $= 2476 - 1289 = 1187$
No. of girls and teachers $= 1246$
$\therefore$ No. of boys $= 2476 - 1246 = 1230$
Total no. of boys and girls

$= 1187 + 1230 = 2417$

Hence, the number of teachers

$= 2476 - 2417 = 59$

39. (d) $1753 = 1000 + 500 + 100 + 100 + 50 + 1$

$+1 + 1 = MDCCLIII$

40. (a) $DCLV = 500 + 100 + 50 + 5 = 655$

$XLVI = (50 - 10) + 5 + 1 = 46$

$MDCL = 1000 + 500 + 100 + 50$

$= 1650 \neq 1560$

So, only (i) and (ii) are correct.

41. (c) $ML = 1000 + 50 = 1050$

$LX = 50 + 10 = 60$

$CLV = 100 + 50 + 5 = 155$

$XL = 50 - 10 = 40$

$\therefore$ *P* has the largest number.

42. (b) $29 = 30 - 1 = 10 + 10 + (10 - 1) = XXIX$

$\therefore$ No. of match sticks needed $= 7$

43. (a) $1618 = 1000 + 500 + 100 + 10 + 5 + 1 +$

$1 + 1 = MDCXVIII$

44. (b) $CDCX = (500 - 100) + 100 + 10$

$= 400 + 110 = 510$

$CDXL = (500 - 100) + (50 - 10) = 440$

$DCLX = 500 + 100 + 50 + 10 = 660$

$DCXL = 500 + 100 + (50 - 10) = 640$

$\therefore$ *CDXL* has the least value.

45. (d) In evaluation of a numerical expression, division (D), multiplication (M), addition (A) and subtraction (S) have to be performed in order.

46. (b) $30 \times 8 \div 2 + 62 - 24$

$= 30 \times 4 + 62 - 24$

$= 120 + 62 - 24$

$= 182 - 24 = 158$

47. (c) $909000 \div 9090 = 159 - ?$

$100 = 159 - ?$

$\therefore$ The missing number is $159 - 100 = 59$

48. (d) $100 - 7 \times 1 + 5$

According to *DMAS*, as multiplication has to be carried out before addition and subtraction, the given expression can be written as $100 - (7 \times 1) + 5$.