# INTSO EDUCATION

## MATHEMATICS TALENT SEARCH OLYMPIAD(MTSO) 2016 - 2017

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|---|---|---|
| | **STAGE - 1** | **TIME** : 60 min. |
| **CLASS : IV** | | **Max. Marks** : 50 |
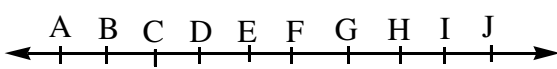
**Instructions:**

⇨ *Fill the OMR sheet completely and carefully.*

⇨ *Each question carries one mark and has only one correct answer. No negative marks.*

⇨ *The question paper contains 50 questions to be answered in 60 minutes.*

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1. How many hundreds are there in 7435 [   ]
   1) 7            2) 74            3) 743            4) 70

2. The smallest 5 digit number is [   ]
   1) 1111            2) 00000            3) 10000            4) 12345

3. The successor of 1119 is [   ]
   1) 1118            2) 1110            3) 1120            4) 1199

4. Number of even numbers formed by using the digits 1, 2, 3, 5 [   ]
   1) 1            2) 4            3) 3            4) 6

5. The place value of 6 in 5769 is [   ]
   1) 6            2) 60            3) 600            4) 6000

6. The difference between the greatest and the smallest 4 digit numbers that can be formed using the digits 0, 9, 9, 8 is [   ]
   1) 1781            2) 1981            3) 1881            4) 1971

7. Ramu bought a television set for ₹4832 and a steel cupboard for ₹2796. How much did he pay in all [   ]
   1) ₹7628            2) ₹6628            3) ₹7268            4) ₹7682

8. A shop keeper earned ₹5078 an spent ₹3794 in a month. How much money was left with him. [   ]
   1) ₹1248            2) ₹1284            3) ₹1384            4) ₹1348

9. By how much is ₹3749 greater than ₹2954 [   ]
   1) ₹895            2) ₹695            3) ₹859            4) ₹795

10. Gopal had to travel 3850km. if he travelled 460km by bus, 1286km by train and rest by car, then the distance travelled by Gopal by car is [   ]
    1) 2140 km            2) 2104 km            3) 1204km            4) 1402 km

11. The sum of two numbers is 484 their H.C.F is 11. The number of such possible pairs is[   ]
    1) 10            2) 11            3) 12            4) 9

12. The last two digits of $3^{2012}$ when represented in decimal notation will be [   ]
    1) 81            2) 01            3) 41            4) 21

13. Among the following, the prime number is [   ]
    1) 73            2) 116            3) 192            4) 183

14. Number of prime numbers are there in between 1 and 50 [   ]
    1) 12            2) 15            3) 17            4) 18

15. Among the follwing is prime truplet            [     ]
1) ( 3, 5, 7)         2) ( 5, 7, 11)        3) ( 7, 11, 13)        4) ( 11, 13, 17)

16. Number of prime factors of 72 is            [     ]
1) 2            2) 3            3) 4            4) 5

17. The number of factors of 360 is            [     ]
1) 20           2) 18          3) 22          4) 24

18. The least composite number is            [     ]
1) 2            2) 3            3) 4            4) 5

19. The H.C.F of 15 and 25 is            [     ]
1) 15           2) 25          3) 10          4) 5

20. The greatest number which exactly divides 90 and 126 is            [     ]
1) 18           2) 42          3) 30          4) 6

21. The L.C.M of the numbers 16, 20, 30 is            [     ]
1) 60           2) 80          3) 120         4) 240

22. The least number which when divided by 8, 12, 16 leaves no remainder      [     ]
1) 58           2) 36          3) 48          4) 63

23. If four bells ring at intervals of 3, 6, 12 and 14 minutes respectively, they ring together at 10am, then what time they ring together again            [     ]
1) 11am        2) 11.24am       3) 11.14am       4) 12.30pm

24. The product of H.C.F and L.C.m of two numbers is 192. If one of the number is 16, then the other number is            [     ]
1) 11           2) 14          3) 12          4) 18

25. A number is said to be a perfect number if sum of the factors is equal to twice that of a number. Among the following, a perfect number is            [     ]
1) 6            2) 8            3) 12          4) 22

26. The H.C.F of two prime numbers is always equal to            [     ]
1) 1            2) 2            3) 10          4) 3

27. If H.C.F of a and b is '1', then the L.C.m of a and b is            [     ]
1) a + b       2) a – b       3) ab         4) $a^2b$

28. Among the following, is an even prime number            [     ]
1) 4            2) 2            3) 0            4) 8

29. Among the following is divisible by 13 is            [     ]
1) 222222       2) 2222        3) 22222       4) 222

30. If a number is said to be divisible by 6 then it is exactly divisible by            [     ]
1) 2, 5         2) 2, 4         3) 2, 3         4) 5, 6

31. The difference of sum of odd place digits and sum of even place digits of a number is zero, then the number is always is divisible by            [     ]
1) 11           2) 13          3) 12          4) 10

32. The Hindu Arabic numeral value of CMXLVIII is            [     ]
1) 958         2) 948         3) 968         4) 848

33. the roman numeral value of 1998 is            [     ]
1) MCMXIIX     b) CMMXVIII     3) MCMXCVIII     4) MMCCCXCIII

34. A number is called a palindrome . If it reads the same forward or backward for example 13531 is a palindrome. the difference between the biggest 10 digit palindrome and the smallest 9 digit palindrome is                   [     ]

1) 976666666          2) 9888888888          3) 98999999998          4) 9777777777

35. A number divisible by 25, then it is also divisible by                   [     ]
1) 3          2) 2          3) 10          4) 5

36. If 742x6 is divisible by 3, then the value of x is                   [     ]
1) 6          2) 3          3) 4          4) 5

37. If 83x68 is divisible by 9, then the value of x is                   [     ]
1) 3          2) 4          3) 5          4) 2

38. If $(2222)^{5555}$ is divided with 7m, then the remainder is                   [     ]
1) 2          2) 3          3) 5          4) 4

39. Th sum of the factors of 49 is                   [     ]
1) 49          2) 57          3) 56          4) 47

40. Which number has the greatest place value of '7'                   [     ]
1) 56720          2) 27435          3) 99997          4) 86274

41. How many basic numerals are there in roman numeration system                   [     ]
1) 7          2) 8          3) 9          4) 10

42. The number of minutes in one complete day is                   [     ]
1) 3600          2) 1200          3) 2400          4) 1440

43. Manohar works 8 hours a day and 5 days a week, he is paid ₹12 an hours. How much does he earn in a week                   [     ]
1) ₹96          2) ₹672          3) ₹480          4) ₹156

44. How many sixes are there in the product of 18 and 479 is                   [     ]
1) 108          2) 371          3) 1437          4) 8622

45. When a number is divided by 5, the quotient is 6. What is the quotient when the same number is divided by 30                   [     ]
1) 1          2) 10          3) 100          4) 1000

46. Each part on the number line drawn is of 1cm. What is the sum  AC + DE + GJ equal to

A   B   C   D   E   F   G   H   I   J                   [     ]

1) AF          2) BH          3) DG          4) FJ

47. How many ones are there in the sum of prime numbers between 10 and 30                   [     ]
1) 60          2) 121          3) 112          4) 2

48. Which one of the following has only one line of symmetry                   [     ]

1) ◯          2) ☆          3) △          4) ⋈

49. The number of lines of symmetry of a square has                   [     ]
1) 6          2) 4          3) 3          4) 0

50. How many millions make 10 crores                   [     ]
1) 1          2) 10          3) 100          4) 1000