INTSO EDUCATION

MATHEMATICS TALENT SEARCH OLYMPIAD(MTSO) 2015 - 2016

STAGE - 1   TIME   : 60 min.

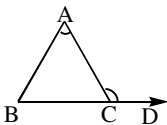**CLASS : V**   Max. Marks   : 50

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.*

1.   Write largest 8 digit number by using the digits 3,5,7,8,1,2,4,9   [   ]
   1) 98754321   2) 92543871   3) 97854321   4) 87954321

2.   What is the successor of 4,77,92,004   [   ]
   1) 4,77,92,003   2) 4,77,92,006   3) 4,77,92,005   4) 4,77,92,001

3.   Number of lakh's required to make a million   [   ]
   1) 10   2) 100   3) 1000   4) 10000

4.   In Roman system 169 can be written as   [   ]
   1) CLXIX   2)MMCDLVIII   3) LVII   4) LXXVII

5.   The number has no symbol in the Roman numeral system .   [   ]
   1) 0   2) 100   3) 1000   4) 1

6.   The predecessor of smallest 8 digit number is   [   ]
   1) 99900090   2) 90000000   3) 9999999   4) 9900009

7.   Number of natural numbers which divide 2007 and gives a remainder 207   [   ]

   1) 6   2) 7   3) 4   4) 5

8.   4297 × 235 = _____   [   ]
   1) 1,000,795   b) 1,008,795   3) 1,000,895   4) 1,009,795

9.   A shop keeper sold 5123 pens on Monday, 6349 pens on Tuesday and 3490 pens on Wednesday. How many pens did he sell ?   [   ]
   1) 15123   2) 63490   3) 14962   4) 14096

10. A shopkeeper bought 225 cartons of 30 eggs each. How many eggs are there in total . [   ]
    1) 6000   2) 5750   3) 7,550   4) 6,750

11. Arun has Rs 7000 with him and Varun has Rs 345 less than Arun. How much money does Varun have   [   ]
    1) 6655   2) 5655   3) 6565   4) 6555

12. Shalini earns Rs 45,320 in 2 months. How much she earns in 12 months   [   ]
    1) 2,71,900   2) 2,71,920   3) 2,00,000   4) 2,72,000

13. A prime number has _____ factors   [   ]
    1) 3   2) 1   3) 4   4) 2

14. Which of the following number is divisible by 11   [   ]
    1) 886   2) 2,461   3) 39,521   4) 2,816

15. The HCF of 96,126,72 is   [   ]
    1) 4   2) 6   3) 72   4)18

16. Find the smallest number which when divided by 1088, 640 and 100 leaves remainder 3 in each case. [   ]
    1) 54397   2) 54400   3) 54403   4) 53403

17. The H.C.F and L.C.M of two numbers is 28 and 1008 and one of the number is 112 then the 2nd number is [   ]
    1) 352   2) 252   3) 462   4) 162

18. The simplest form of the fraction $\dfrac{18}{27}$ [   ]

    1) $\dfrac{6}{9}$ 2) $\dfrac{4}{3}$ 3) $\dfrac{3}{4}$ 4) $\dfrac{2}{3}$

19. Find the 10th bracket in the given sequence (2,5) , (3,7) (5,11) (7,13) ------ is [   ]
    1) (24,32)   2) (29,37)   3) (29,31)   4) (29,33)

20. A piece of cloth $\dfrac{7}{8}$ m in length is cut off from a cloth of material of length $5\dfrac{1}{3}$ m. What is the length of the remaining cloth [   ]

    1) $4\dfrac{11}{24}$ m   2) $5\dfrac{11}{24}$ m   3) $6\dfrac{11}{23}$ m   4) $4\dfrac{12}{23}$ m

21. $\dfrac{3}{7}$ of a number is 21. Then the number is [   ]
    1) 59   2) 39   3) 49   4) 69

22. Ram had 40 pens. We gave $\dfrac{3}{4}$ of the pens to his brother. How many pens did he give? [   ]
    1) 10   2) 20   3) 25   4) 30

23. If a pile of books is 64cm high, and each book has a uniform thickness of 3.2 cm, then how many books are there in the pile ? [   ]
    1) 15   2) 20   3) 25   4) 30

24. Howmany $\dfrac{2}{9}$ are there in 72 [   ]
    1) 16   2) 224   3) 324   4) 126

25. 25.4 litters is equal to howmany milliliters . [   ]
    1) 254ml   2) 2540ml   3) 2.54ml   4) 25400ml

26. A bag contains 50kg 720g dal. If there are 7 such bags, what will be the total weight ? [   ]
    1) 355kg 40g   2) 255kg 50g   3) 250kg40g   4) 355kg30g

27. 1 decimeter is equal to howmany meters [   ]
    1) 0.01 meter   2) 0.1 meter   3) 1.1 meter   4) 0.001 meter

28. 13 minutes 25 seconds is equal to howmany seconds? [   ]
    1) 780 sec   2) 8155 sec   3) 805 sce   4) 715 sec

29. If 3 cats eat 3 rats in 3 minutes then one cat eat one rat in how many minutes [   ]
    1) 1 min   2) 2 min   3) 3 min   4) 4min

30. The ratio of Rs. 3 to 210 paise [   ]
    1) 3 : 7   2) 7 : 3   3) 10: 7   4) 7 ; 10

31. A rod 460m long is cut into two pieces in the ratio 11: 12 then the length of each piece. [   ]
    1) 200M, 220M   2) 240M, 260M   3) 260M, 280M   4) 220M, 240M

32. The value of 8% of 150 is [ ]
   1) 10   2) 15   3) 12   4) 25

33. The cost price of a video CD is Rs 150 and its selling price Rs 180 then the gain percent is
   1) 20%   2) 30%   3) 25%   4) 15%   [ ]

34. Find the simple interest if P = Rs 8,000, R = 12% per annum and T = 5 years   [ ]
   1) ₹ 4000   2) ₹ 4500   3) ₹4300   4) ₹4800

35. Rishita scored 93 percent marks in science in 1st term, 91 percent in 2nd term and 92 percent in 3rd term then her average percentage of marks in science.   [ ]
   1) 90%   2) 92%   3) 93%   4) 94%

36. If a car covered a distance of 400km in 8 hours , then the speed of car is   [ ]
   1) 40km /h   2) 60km/h   3) 45km/h   4) 50km/h

37. Convert 100°c to Fahrenheit   [ ]
   1) 200°F   2) 210°F   3) 212°F   4) 214°F

38. The supplementary angle of 60° is   [ ]
   1) 30°   2) 120°   3) 90°   4) 60°

39. Which of the following is a Reflex angle   [ ]
   1) 280°   2) 370°   3) 180°   4) 160°

40. Name of the figure formed by 5 line segments is   [ ]
   1) quadrilateral   2) hexagon   3) pentagon   4) octagon

41. How many ice cubes of side 2cm can fit into an ice tray of measure 2cm × 4cm × 9cm
   1) 8   2) 7   3) 4   4) 9   [ ]

42. Cuboid has how many edges   [ ]
   1) 6   2) 8   3) 10   4) 12

43. Name of the figure as shown below   [ ]

   1) Cylinder   2) cuboid

   3) sphere   4) cone

44. If two lines are said to be perpendicular, then the angle between them is   [ ]
   1) 60°   2) 180°   3) 90°   4) 360°

45. If Δ ABC is an equilateral triangle then ∠ACD = ?   [ ]
   1) 90°   2) 120°
   3) 60°   4) 100°

46. How many ones we have to use to write 1 to 100   [ ]
   1) 20   2) 21   3) 22   4) 24

47. How many prime numbers are there below 150   [ ]
   1) 37   2) 36   3) 32   4) 34

48. The figure formed by joining the mid points of the sides of a rectangle is   [ ]
   1) Rectangle   2) Rhombus   3) square   4) kite

49. 4ab5 is a four digit number divisible by 55 where a,b are unknown digits, then b −a is [ ]
   1) 1   2) 4   3) 5   4) 0

50. The area of an equilateral Δ^{le} ABC with side AB = 4cm   [ ]
   1) $2\sqrt{3}$ cm²   2) $3\sqrt{3}$ cm²   3) $4\sqrt{3}$ cm²   4) $5\sqrt{3}$ cm²