Duration : 60 min.
Class : 7th

Maximum Marks : 180
Subject : MATHEMATICS

International Talent Search Examination - 2022-23

अंतर्राष्ट्रीय प्रतिभा खोज परीक्षा - २०२२-२३

Organized by

Savitri Skill Development Institute, Training Partner with
Ministry of Micro Small & Medium Enterprises (MSME), Govt. of India.

TEST BOOKLET

Name : .....

Class : ..... School: .....

Father's Name : ..... Father's Occupation : .....

Mother's Name : ..... Mother's Occupation : .....

Categories : Gen ☐ OBC ☐ SC ☐ ST ☐

Correspondence Address :.....

Date of Birth : ☐☐ ☐☐ ☐☐☐☐

Father's Contact No : ☐☐☐☐☐☐☐☐☐☐

Home/Mother's Contact No. : ☐☐☐☐☐☐☐☐☐☐

WhatsApp No. : ☐☐☐☐☐☐☐☐☐☐

Basic Instructions:

i. Ensure that your personal data has been entered correctly.
ii. Immediately after opening the test booklet verify that all the pages are printed properly and are in order. If there is a problem with your test booklet, immediately inform the invigilator. You will provided with the replacement.
iii. All questions in are compulsory.
iv. For every correct answer you will be awarded with 4 marks and for all incorrect answer 1 mark will be deducted.
v. Directions for answering the questions are given. Read those directions carefully and answer the question by circling the bubble in the OMR Sheet Provided to you. Test booklet/OMR Sheet will be submitted at the end of the examination.
vi. Follow the instructions given by the invigilator. Students found violating the instructions will be disqualified.
vii. Rough work can be done separately or on the Question paper.
viii. Please fill the bubbles in OMR sheet with Blue or Black pen only.
ix. Do not tear the question paper or OMR sheet else you will be disqualified in the examination.

CLASS-7 MATHEMATICS

1. $(-1)^{273}$ =
   (A) - 1 (B) 1 (C) 0 (D) none of these

2. If $25 \times x = 60 \times 5$, then the value of x is equal to
   (A) 12 (B) 13 (C) 14 (D) none of these

3. 1345 - (2598 - 3682) =
   (A) 2429 (B) 4292 (C) 2942 (D) none of these

4. Which of the following numbers are co-primes?
   (A) 52, 38 (B) 56, 15 (C) 136, 51 (D) 108, 52

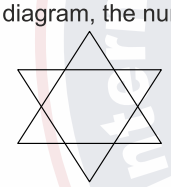
5. The value of $\sqrt{(148-84)+(49\times 4)}$ is equal to
   (A) 26 (B) 260 (C) 16 (D) none of these

6. Number of lines of symmetry for the alphabet 'S' is
   (A) no line of symmetry (B) one line of symmetry
   (C) two lines of symmetry (D) infinite lines of symmetry

7. A box full of 10 books each weighing 100 gm, weigh 2 kg. If 5 books are removed, then the weight of the box now, is
   (A) 1 kg (B) 1kg, 500 gm (C) 1kg, 200 gm (D) 750 gm

8. Arrange the following rational numbers in the decreasing order $-\frac{2}{7}, -\frac{10}{49}, -\frac{29}{7}, \frac{30}{49}$
   (A) $\frac{30}{49}, -\frac{10}{49}, -\frac{2}{7}, -\frac{29}{7}$ (B) $\frac{30}{49}, -\frac{29}{7}, -\frac{10}{49}, -\frac{2}{7}$ (C) $\frac{30}{49}, -\frac{2}{7}, -\frac{10}{49}, -\frac{29}{7}$ (D) none of these

9. In the diagram, the number of pairs of parallel lines are



   (A) 1 (B) 4 (C) 2 (D) 3

10. The difference in place value the two fives in the digit 592531 is
    (A) 459400 (B) 54100 (C) 500500 (D) 499500

11. The value of |- 3| + |- 8| is equal to
    (A) 10 (B) 5 (C) 11 (D) none of these

12. In the diagram, the value of x is

    (A) 120° (B) 121° (C) 125° (D) none of these

13. 11 + {(111 - 1111) - 2222} =
    (A) - 2113 (B) - 3211 (C) - 2311 (D) none of these

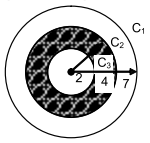
14. $\frac{(3.12)^2-(4.13)^2}{3.12-4.13}$ =
    (A) 7.25 (B) 2.7091 (C) 7.0912 (D) none of these

15. If $\frac{(13^3+7^3)^2}{13^2+?} = 20$, then the value of ? is equal to
    (A) 6 (B) 20 (C) 7 (D) none of these

16. The average of 7, 15, 4 and x is 23. The value of x is equal to
(A) 66 (B) 33 (C) 55 (D) 77

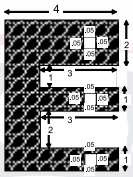
17. If $\sqrt{24025} + x = 5 \times \frac{1}{3} \times 240$, then the value of x is
(A) 725 (B) 245 (C) 1025 (D) 1250

18. In the given figure, if radius of C_1 is 7, C_2 is 4 and C_3 is 2. The area of the shaded region is



(A) 11π (B) 12.5π (C) 12π (D) none of these

19. In the given figure, area of the shaded region is



(A) 18.31 (B) 18.01 (C) 18.25 (D) none of these

20. If H.C.F. of three distinct numbers is 13 and L.C.M. is 52, then the sum of three numbers are
(A) 78 (B) 117 (C) 91 (D) 65

21. Three holes of radius 0.5 cm are punched on a square sheet of side 7 cm. The area of the remaining sheet is
(A) 49 - 0.75π (B) 49 - 0.25π (C) 49 - 0.50π (D) none of these

22. Circumference of the circle is 10π metre. The area of the circle is
(A) 78.5 (B) 30π (C) 25π (D) (A) and (C) both

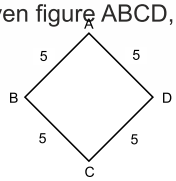
23. Which one is a closed figure?
(A)  (B)  (C)  (D) 

24. If $\frac{x}{12} - \frac{1}{6} = \frac{x}{6} - 5$, then the value of x is equal to
(A) 58 (B) 58.5 (C) 58.2 (D) 58.01

25. Between two points A and B, number of arcs that can be drawn is
(A) 1 (B) 2 (C) infinite (D) 0

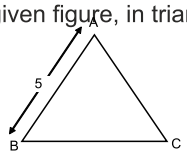
26. If a - b = 5 and ab = 1, then the value of $a^2 + b^2$ is
(A) 25 (B) 29 (C) 26 (D) 27

27. In the given figure ABCD, AB = 5, BC = 5, CD = 5 and DA = 5, then ABCD is



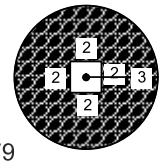
(A) square (B) rhombus (C) (A) or (B) (D) none of these

28. In the given figure, in triangle ABC, if ∠B = ∠C = 60° and AB = 5, then BC is equal to



(A) 2 (B) 3 (C) 5 (D) can't say

29. In the given figure, area of the shaded region is



(A) 24.79 (B) 24.06 (C) 24.23 (D) 24.26

30. If at present, father's age is twice of his son and his daughter is young to his son by 4 years, then after how many years father's age will be twice of his daughter?
(A) 6 (B) 7 (C) 8 (D) 9

31. The average of ten numbers is 17. If each number is increased by 5, then the new average will be:
(A) 22 (B) 67 (C) 17 (D) 85

32. If $\frac{1}{5}$ of $\frac{3}{5}$ of a number is 144, then the number is
(A) 1200 (B) 2880 (C) 8640 (D)None of these

33. If the sum of 4 consecutive integers is 70 then the greatest among them is
(A) 19 (B) 23 (C) 17 (D) 16

34. If a, b, c are three numbers then a + (b + c) = (a + b) + c is known as
(A) commutative law of addation: (B) associative law of addition
(C) law of distribution (D) none of these

35. Alka gave three fourth of her amount to Subha and half of what remained with her to Mohini. If Mohini got Rs.625 then how much did Alka have in the beginning?
(A) Rs.3750 (B) Rs.7000 (C) Rs.5000 (D) Rs.5325

36. If the mean of a, b, c, d, e is 15 then what is the mean of a, b + c and d + e?
(A) 15 (B) 25 (C) 30 (D) 20

37. The multiplicative inverse of $|(-2)+(-5)x(-7)|$ is
(A) $\frac{1}{33}$ (B) $-\frac{1}{33}$ (C) 33 (D) -33

38. If $\frac{x}{x+3}=\left(\frac{1}{2}\right)^2$, then value of x is :
(A) 6^{-1} (B) $\frac{2}{3}$ (C) 1 (D) 3

39. One of the exterior angle of triangle is 70°. If interior opposite angles are in ratio 2:5 then smallest angle of triangle is :
(A) 20° (B) 10° (C) 50° (D) 30°

40. The angle between two hands of clock at 4:30 pm is
(A) 45° (B) 90° (C) 50° (D) 60°

41. Which one of the following is the rational number lying between $\frac{6}{7}$ and $\frac{7}{8}$?
(A) $\frac{3}{4}$ (B) $\frac{99}{112}$ (C) $\frac{95}{112}$ (D) $\frac{97}{112}$

42. How many one-fourths should be added to 2 to get sum 4?
(A) 3 (B) 4 (C) 5 (D) 7

43. In a unit fraction, the numerator is
(A) 0 (B) 1 (C) 2 (D) 3

44. 18 of [59 - {7 x 8 + (26 - 3 of 5)}] is
(A) –188 (B) 144 (C) –144 (D) 188

45. What is the total number of candidates at an examination, if 3/10th candidates fail and the number of those who passed exceeds the number of those who failed by 260?
(A) 560 (B) 550 (C) 650 (D) 500