

Duration : 60 min.
Class : 6th

Maximum Marks : 180
Subject : MATHEMATICS



International Talent Search Examination - 2023-24

अंतराष्ट्रीय प्रतिभा खोज परीक्षा - २०२३-२४

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:

- Ensure that your personal data has been entered correctly.
- 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 be provided with the replacement.
- All questions are compulsory.
- For every correct answer you will be awarded with 4 marks and for all incorrect answer 1 mark will be deducted.
- 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.
- Follow the instructions given by the invigilator. Students found violating the instructions will be disqualified.
- Rough work can be done separately or on the Question paper.
- Please fill the bubbles in OMR sheet with Blue or Black pen only.
- Do not tear the question paper or OMR sheet else you will be disqualified in the examination.

CLASS-6 MATHEMATICS

- Smallest even prime number is
(A) 4 (B) 9 (C) 2 (D) 8
- The value of digit A in 8928A if it is divisible by 10 is equal to
(A) 5 (B) 9 (C) 0 (D) 1
- $(17849 \times 82) + (18 \times 17849) =$ _____
(A) 1784982 (B) 1780049 (C) 9007849 (D) 1784900
- Roman numeral for 769 is
(A) DCCXLIX (B) DXCVI (C) DCCLXIX (D) DCCCL
- Estimate the sum $(64 + 79)$ to the nearest ten.
(A) 140 (B) 100 (C) 120 (D) 160
- A number divisible by 63 is also
(A) divisible by 3 and 4 (B) divisible by 3 and 5 (C) divisible by 3 and 7 (D) divisible by 9 and 12
- Largest even prime number is
(A) 2 (B) 1024 (C) 2×10^{24} (D) cannot be determined
- L.C.M and H.C.F of 63 and 36
(A) 252, 3 (B) 252, 2 (C) 251, 2 (D) 252, 9
- Choose correct statement:
(A) every factor of a number is divisor of its multiple
(B) every multiple of a number is divisor of its factor
(C) H.C.F of two numbers is not divisor of multiples of these numbers
(D) L.C.M of two numbers is factor of number
- HCF of 1007 and 1273 is
(A) 19 (B) 21 (C) 23 (D) None of these
- Predecessor of 0 as a whole number is
(A) -1 (B) +1 (C) itself 0 (D) doesn't exist
- The LCM of 100 and 101 is
(A) 10100 (B) 10001 (C) 10101 (D) none of these
- The HCF of 100 and 101 is
(A) 10100 (B) 1 (C) 37 (D) 7
- Quotient =
(A) $\frac{\text{Divisor} - \text{Remainder}}{\text{Dividend}}$ (B) $\frac{\text{Dividend} - \text{Remainder}}{\text{Divisor}}$
(C) $\frac{\text{Dividend} + \text{Remainder}}{\text{Divisor}}$ (D) None of these
- Let a be an integer then choose the correct option:
(A) $(a + 1)$ is called the predecessor of a (B) $(a - 1)$ is called the successor of a
(C) $(a + 1)$ is called the successor of a (D) Only B
- Which of the following is a true statement?
(A) $-7 > -4$ (B) $-7 < -4$
(C) -7 and -4 are non comparable (D) None of these

17. Successor of -18 is
 (A) -19 (B) 17 (C) -17 (D) 19
18. On subtracting 8 from -4 , we get
 (A) 4 (B) 12 (C) -12 (D) None of these
19. $(-9) \times (6) + (-9) \times 4 = ?$
 (A) -90 (B) 90 (C) -18 (D) 18
20. $0 \div (-70) = ?$
 (A) -70 (B) 0 (C) Not defined (D) None of these
21. The product of $(a - b)(a^2 + ab + b^2)$ is equal to
 (A) $a^3 + b^3$ (B) $a^3 - b^3$ (C) 0 (D) none of these
22. The cost of a register is x and cost of a book is y . If Monu purchased exactly x number of registers and books each, then the algebraic expression that expresses the total cost of registers and books is equal to
 (A) $x^2 + x^2y$ (B) $x^2 + xy$ (C) $x^3 + y^2$ (D) none of these
23. Given x is any variable such that $3x > x^2$. Then
 (A) its always true (B) its always false (C) true for $x = a$ (D) true for $x = 2$
24. If quotient $= 3x^2 - 2x + 1$, remainder $= 2x - 5$ and divisor $= x + 2$, then the dividend is
 (A) $3x^3 - 4x^2 + x - 3$ (B) $3x^3 - 4x^2 - x + 3$ (C) $3x^3 + 4x^2 - x + 3$ (D) $3x^3 + 4x^2 - x - 3$
25. $(9p - 5q)^2 + 180pq$ is equivalent to
 (A) $(5p + 9q)^2$ (B) $(5p - 9q)^2$ (C) $(9p + 5q)^2$ (D) $(9p - 5q)^2$
26. The edges of two cubes are 2 cm and 4 cm. Find the ratio of the volume of the two cubes.
 (A) $8 : 1$ (B) $1 : 8$ (C) $1 : 9$ (D) $9 : 1$
27. The length of the longest diagonal of the cube with side 'a' is
 (A) $a\sqrt{2}$ (B) $a\sqrt{3}$ (C) $a\sqrt{5}$ (D) $a\sqrt{8}$
28. Find the volume of a cylinder whose the radius of the base is 7 cm and height is 10 cm.
 (A) 1540 cm^3 (B) 1500 cm^3 (C) 1560 cm^3 (D) None of these
29. The area of the base of a right circular cone is 154 sq. cm and its height is 24 cm, then its curved surface area is
 (A) 450 sq. cm (B) 550 sq. cm (C) 650 sq. cm (D) 750 sq. cm
30. If the total surface area of a cube is 3750 square metres, then the length of the edge is
 (A) 35 metres (B) 25 metres (C) 15 metres (D) 5 metres
31. If $\frac{547.527}{0.0082} = x$, then the value of $\frac{547527}{82}$ is
 (A) $\frac{x}{10}$ (B) $10x$ (C) $100x$ (D) none of these
32. $2\frac{1}{3} + 4\frac{1}{2} = ?$
 (A) $6\frac{1}{6}$ (B) $6\frac{1}{5}$ (C) $6\frac{2}{5}$ (D) $6\frac{5}{6}$
33. Sum of $2\frac{37}{8}$, $2\frac{5}{16}$ and $2\frac{7}{24}$ is
 (A) $7\frac{1}{24}$ (B) $6\frac{47}{48}$ (C) $6\frac{23}{24}$ (D) $6\frac{17}{48}$
34. Shikha ate $\frac{2}{5}$ of a cake and Anandi ate $\frac{1}{4}$ fo the same cake. What part of the cake was left?
 (A) $\frac{7}{10}$ (B) $\frac{13}{20}$ (C) $\frac{7}{20}$ (D) $\frac{11}{20}$

35. How much is $10\frac{1}{12}$ more than the sum of $1\frac{17}{6}$ and $2\frac{7}{15}$?
 (A) $6\frac{1}{20}$ (B) $6\frac{9}{20}$ (C) $2\frac{11}{20}$ (D) $6\frac{21}{20}$
36. The total weight of a bag containing 13 kg 750 g of potatoes and 8 kg 80 g of tomatoes is 22 kg 200 g. How much is the weight of the empty bag?
 (A) 370 g (B) 160 g (C) 100 g (D) none of these
37. If $1.5x = 0.04y$, then the value of $\frac{y-x}{y+x}$ is
 (A) $\frac{730}{77}$ (B) $\frac{73}{77}$ (C) $\frac{7.3}{77}$ (D) none of these
38. The value of $\left[35.7 - \left[3 + \frac{1}{3 + \frac{1}{3}} \right] - \left[2 + \frac{1}{2 + \frac{1}{2}} \right] \right]$ is
 (A) 30 (B) 34.8 (C) 36.6 (D) 41.4
39. Simplify: $\frac{0.2 \times 0.2 + 0.2 \times 0.02}{0.044}$
 (A) 0.004 (B) 0.4 (C) 1 (D) 2
40. On simplification of $\frac{(2.644)^2 - (2.356)^2}{0.288}$, we get
 (A) 1 (B) 4 (C) 5 (D) 6
41. The floor area of a room is 72m^2 and its length is 9m 60cm. The breadth of the room is
 (A) 6m 60cm (B) 7m 50cm (C) 8m (D) none of these
42. If the radius of a circle is doubled, then the diameter becomes
 (A) 2 times (B) 3 times (C) 4 times (D) remains the same
43. Each of the equal sides of an isosceles triangle is 4.7 cm and its third side is 5.6 cm. The perimeter of the triangle is
 (A) 10.3 cm (B) 20.6 cm (C) 15.9 cm (D) 15 cm
44. Find the area of a square of side 1.6 metres.
 (A) 2.56 sq. m (B) 2.42 sq. m (C) 1.48 sq. m (D) 2.38 sq. m
45. The length of a rectangle is 1.6 m and its breadth is 75 cm. Then, its area is
 (A) 1200 sq. cm (B) 12000 sq. cm (C) 6000 sq. cm (D) 9000 sq. cm