



MATHEMATICS TALENT HUNT 2025

Organized by : The Pi Group of Mathematics (TPGM), Cooch Behar

Registration No. – S0031696 of 2022-23

Class – VI

Full Mark : 100

Time : 1 Hr 30 mins.

Instructions to the Candidates

1. Candidates must write their Name, Class, Roll No. allotted for the exam and Name of their School correctly in the specific places of the answer sheet.
2. There are 50 questions of 2 marks each. Four possible options of answer are given for each question.
3. Candidates should choose the correct option and completely darken the circle with that option written in it in the answer sheet (OMR). For example, say the correct option for Question Number 10 is (c), then the candidate should darken the circle completely with 'c' written in it against the number 10 of the answer sheet. Use black ball pen or pencil for darkening.
4. There is no negative marking.

1. A ratio is a _____ number.

- (a) Whole (b) Natural (c) Pure (d) None of these

2. Compare and fill in the box. $795 \times 999 + 795$ $887 \times 10 \times 461 - 361 \times 8870$

- (a) > (b) < (c) = (d) None of these

3. The whole number which does not have a predecessor is

- (a) 9 (b) 1 (c) 0 (d) 100

4. The product of three consecutive numbers is always divisible by

- (a) 4 (b) 6 (c) 12 (d) 24

5. A picture representation of data is called -

- (a) Different Graph (b) Attractive Graph (c) Pictograph (d) None of these

6. Which of the following statement is not true?

- (a) $0 + 0 = 0$ (b) $0 \div 0 = 0$ (c) $0 \times 0 = 0$ (d) $0 - 0 = 0$

7. The number of digits in a number starting with 79 crores will have

- (a) 7 digits (b) 8 digits (c) 6 digits (d) 9 digits

8. The sum of first n natural number is $\frac{n(n+1)}{2}$. Using this, what is the value of $3 + 4 + 5 + 6 + \dots + 20$?

- (a) 205 (b) 217 (c) 207 (d) 215

9. Parallelogram having all the sides equal is called

- (a) Rectangle (b) Square (c) Parallelogram (d) Rhombus

10. If 'n' is a prime number such that $(n+2)$ is also a prime number, which of the following is true for $n + (n+2)$?

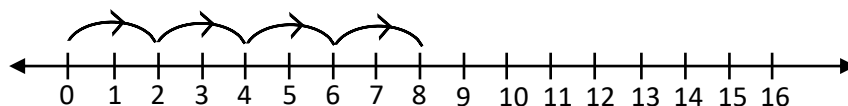
- (a) $n + (n+2)$ is an odd integer. (b) $n + (n+2)$ is a prime integer.
(c) $n + (n+2)$ is a perfect square. (d) $n + (n+2)$ is an even integer.

11. Put the right option in place of the question mark (?) LMN : OPQ :: TUV : ?

- (a) TVL (b) XZA (c) XWY (d) WXY

12. The value of the numeral MCMXCIX is
 (a) 1999 (b) 1888 (c) 1988 (d) 1998
13. Arpit wants to place 85.5 kg of food grains in small bags. If each bag hold 0.5 kg. How many bags are needed?
 (a) 85 (b) 55 (c) 160 (d) 171
14. How many sixths must be added to $\frac{5}{12}$, to make $3\frac{3}{4}$?
 (a) 18 (b) 15 (c) 10 (d) 20
15. Which angle can not be draw using set-square?
 (a) 75° (b) 105° (c) 115° (d) 90°
16. The mean of first five whole number is
 (a) 2 (b) 3 (c) 4 (d) 5
17. $\frac{100^2 + 100^3}{100^2} - 100$ is equal to
 (a) 486 (b) 481 (c) 468 (d) None of these
18. Write the degree of the polynomial $8(x^2)^3y^3 - \left(y^{\frac{5}{2}}\right)^6 - 6$
 (a) 9 (b) 15 (c) 8 (d) 6
19. The LCM of two numbers is 27. The numbers cannot be
 (a) 3, 27 (b) 1, 27 (c) 3, 9 (d) 9, 27
20. Which of the following fraction is closest to 0 ?
 (a) $\frac{5}{12}$ (b) $\frac{2}{3}$ (c) $\frac{5}{6}$ (d) $\frac{3}{4}$
21. If $x_1 < x_2 < x_3 < \dots < x_{10}$, then median of the given data
 (a) x_5 (b) $\frac{1}{2}(x_5 + x_6)$ (c) x_6 (d) None of these
22. The 3D figure that has one edge is
 (a) sphere (b) cylinder (c) cone (d) circle
23. The point where the bisector of the angles of a triangle meet, is called
 (a) Orthocentre (b) Centroid (c) Euler point (d) Incentre
24. Example of an abstract number
 (a) 8 (b) 8 cm (c) 5 km (d) None of these
25. Which is not true? All empty sets are _____.
 (a) Finite sets (b) Equal sets (c) Equivalent sets (d) Infinite sets
26. Choose the related word from the given alternative.
 Sunday : Tuesday :: Saturday : ____?
 (a) Wednesday (b) Tuesday (c) Sunday (d) Monday
27. If a and b are any two whole number and $a < b$ then, $a - b$ is
 (a) Natural number (b) Positive number (c) Whole number (d) None of these

28. What does the given number line represents ?



- (a) $4 + 2$ (b) $4 - 2$ (c) 4×2 (d) $4 \div 2$

29. What should be added to $-12 + (-98) - (-84) + (-7)$ to make 30 ?

- (a) -63 (b) 63 (c) -33 (d) 33

30. If $\frac{3}{4} = \frac{x}{28} = \frac{y}{32}$ then, the values of x and y respectively are

- (a) 21, 24 (b) 21, 28 (c) 18, 24 (d) 21, 25

31. If '+' means ' $\times$ ', '-' means ' $\div$ ', ' $\times$ ' means '-' and ' $\div$ ' means '+' then, $16 \div 64 - 8 \times 4 + 2 = ?$

- (a) 12 (b) 16 (c) 18 (d) 24

32. What is the value of $2x^3 - 3x^2$ if $x = -1$.

- (a) 0 (b) -2 (c) -3 (d) -5

33. If the number 21y5 is multiple of 9 where y is a digit, the value of y is

- (a) 4 (b) 3 (c) 2 (d) 1

34. $a \otimes b = \frac{a+b}{3}$ then the value of $3 \otimes 6$ is

- (a) 6 (b) 3 (c) 18 (d) 9

35. Which one is true ?

- (a) $0.09 > \frac{7}{8}$ (b) $6\% < 0.09$ (c) $\frac{7}{8} < 8.0 \times 10^{-3}$ (d) $8.0 \times 10^{-3} > 6\%$

36. Amit can type 28 words per minute. At this rate, how many words can Amit type in 5.5 minutes?

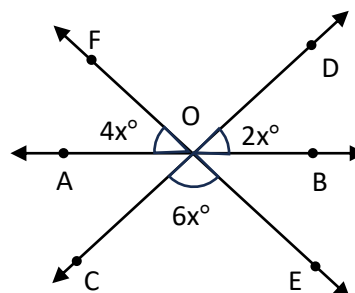
- (a) 280 (b) 154 (c) 550 (d) 144

37. What must be added to x^2 to get 1 ?

- (a) $1 + x^2$ (b) $-1 - x^2$ (c) $1 - x^2$ (d) $x^2 - 1$

38. Find the measures of angle DOE in the given figure.

- (a) 80°
(b) 90°
(c) 100°
(d) 70°



39. Number of faces and edges of a tetrahedron are

- (a) 4, 6 (b) 6, 4 (c) 6, 2 (d) 5, 6

40. Which of the following letter has a vertical line of symmetry ?
 (a) N (b) E (c) L (d) T
41. Co-efficient of x^0 in the polynomial $2x^2 - 9x - 5$ is
 (a) 2 (b) 5 (c) - 5 (d) - 9
42. HCF of three consecutive even number is
 (a) 1 (b) 0 (c) 2 (d) 4
43. Length of two sides of a triangle are 5 cm and 6 cm. Which of the length cannot be the length of the third side?
 (a) 7 cm (b) 10 cm (c) 8 cm (d) 12 cm
44. If $a = 2, b = 3, c = 4$ then find the value of $234\frac{3}{4} - abc\frac{b}{c}$
 (a) 0 (b) 210
 (c) $210\frac{3}{4}$ (d) $234\frac{3}{4}$
45. Which of the following angle is complement to itself?
 (a) 30° (b) 60° (c) 45° (d) 90°
46. Which of the following property cannot be applied for subtraction?
 (a) Associative (b) Closure (c) Distributive (d) None of these
47. A rectangular table cover measures 2 m 45 cm by 1 m 25 cm. The perimeter of the cover is
 (a) 6 m 80 cm (b) 7 m 40 cm (c) 8 m 70 cm (d) 7 m 70 cm
48. What is the difference between the face value and place value of 3 in the number 780635 ?
 (a) 0 (b) 1 (c) 30 (d) 27
49. Every number is a _____ and a _____ of itself.
 (a) Prime, Composite (b) Even, Odd (c) Factor, Multiple (d) None of these
50. 420 articles are divided among A, B and C such that A gets three times that of B and B gets five times that of C. The number of articles received by B is
 (a) 120 (b) 100 (c) 150 (d) 130
