CTET Mathematics Practice Test

Paper I (For Classes I-V)

General Instructions

Practice Test - 30

- 1. This paper contains a total of **30 questions**.
- 2. All questions are **compulsory**.
- 3. Each question carries 1 mark.
- 4. There is no negative marking.
- 5. The maximum marks for this test are **30**.
- 6. The total duration of the test is **45 minutes**.
- 7. Choose the most appropriate answer from the given options.
- 8. Use of calculators, mobile phones, or any electronic devices is **not permitted**.
- 9. Rough work may be done on the space provided at the end of the paper.
- 10. Read each question carefully before answering.

All the Best!

- 1. A teacher wants to teach the concept of "even and odd numbers" to Class II students. Which activity is most effective?
 - (a) Using pairs of objects to show grouping in twos
 - (b) Asking students to list even and odd numbers
 - (c) Writing definitions on the board
 - (d) Solving worksheets on even and odd numbers

- 2. The coordinates of a triangle are A(0,0), B(8,0), and C(4,8). A line parallel to BC intersects AB at (2, y) and AC at (x, 2). The value of x is:
 - (a) 1
 - (b) 1.5
 - (c) 2
 - (d) 2.5
- 3. Which method is best to teach "place value" to Class III students?
 - (a) Using an abacus and base-10 blocks
 - (b) Asking students to write numbers in expanded form
 - (c) Lecturing on the history of the decimal system
 - (d) Memorizing place value charts
- 4. The coordinates of a rectangle are A(0,0), B(7,0), C(7,3), and D(0,3). The length of the diagonal AC is:
 - (a) 7 units
 - (b) 8 units
 - (c) 9 units
 - (d) 10 units
- 5. To assess understanding of "fractions," which activity is most appropriate?
 - (a) Solving fraction problems on paper
 - (b) Using fraction circles to compare and add fractions
 - (c) Lecturing on the importance of fractions
 - (d) Memorizing fraction tables
- 6. The smallest 4-digit number formed using the digits 4, 0, 6, 8 (each digit used only once) is:
 - (a) 0468
 - (b) 4068
 - (c) 4608
 - (d) 4680
- 7. To teach "symmetry" to Class IV students, which activity is most suitable?

- (a) Drawing symmetrical shapes
- (b) Using paper folding to demonstrate lines of symmetry
- (c) Lecturing on types of symmetry
- (d) Memorizing symmetrical shapes
- 8. The equation of a circle with center (2,5) and radius 4 is:
 - (a) $(x-2)^2 + (y-5)^2 = 16$
 - (b) $(x+2)^2 + (y+5)^2 = 16$
 - (c) $(x-2)^2 + (y-5)^2 = 4$
 - (d) $(x+2)^2 + (y+5)^2 = 4$
- 9. To teach "measurement of length" to Class I students, which activity is most suitable?
 - (a) Using a ruler to measure objects
 - (b) Using non-standard units like hand spans and footsteps
 - (c) Lecturing on the history of measurement
 - (d) Memorizing standard units of length
- 10. The coordinates of a triangle are A(0,0), B(6,0), and C(0,6). A line parallel to BC intersects AB at (1, y) and AC at (x, 1). The value of y is:
 - (a) 0.5
 - (b) 1
 - (c) 1.5
 - (d) 2
- 11. To introduce "data handling" to Class III students, which activity is most suitable?
 - (a) Creating a bar graph using given data
 - (b) Collecting and organizing data in a tally chart
 - (c) Lecturing on the importance of data handling
 - (d) Memorizing types of graphs
- 12. The length of the diagonal BD of a square with vertices A(0,0), B(6,0), C(6,6), and D(0,6) is:
 - (a) $6\sqrt{2}$ units

- (b) 8 units
- (c) 10 units
- (d) 12 units
- 13. To teach "addition with regrouping" to Class II students, which activity is most suitable?
 - (a) Using base-10 blocks to demonstrate regrouping
 - (b) Solving addition problems on paper
 - (c) Lecturing on the history of addition
 - (d) Memorizing addition facts
- 14. The perimeter of a rectangle with vertices A(0,0), B(5,0), C(5,4), and D(0,4) is:
 - (a) 14 units
 - (b) 16 units
 - (c) 18 units
 - (d) 20 units
- 15. To assess understanding of "3D shapes," which activity is most appropriate?
 - (a) Drawing 3D shapes
 - (b) Identifying real-life objects like cubes and spheres
 - (c) Lecturing on the properties of 3D shapes
 - (d) Memorizing the names of 3D shapes
- 16. The area of a triangle with vertices A(0,0), B(7,0), and C(3,7) is:
 - (a) 14 square units
 - (b) 21 square units
 - (c) 24.5 square units
 - (d) 28 square units
- 17. To teach "time" to Class II students, which activity is most suitable?
 - (a) Using a digital clock to show time
 - (b) Using an analog clock with movable hands
 - (c) Lecturing on the history of clocks
 - (d) Memorizing the time table

- 18. The equation of a circle with center (0,0) and radius 6 is:
 - (a) $x^2 + y^2 = 36$
 - (b) $x^2 + y^2 = 12$
 - (c) $x^2 + y^2 = 6$
 - (d) $x^2 + y^2 = 2$
- 19. To teach "subtraction with borrowing" to Class III students, which activity is most suitable?
 - (a) Using base-10 blocks to demonstrate borrowing
 - (b) Solving subtraction problems on paper
 - (c) Lecturing on the history of subtraction
 - (d) Memorizing subtraction facts
- 20. The area of a rectangle with vertices A(1,1), B(6,1), C(6,4), and D(1,4) is:
 - (a) 12 square units
 - (b) 15 square units
 - (c) 18 square units
 - (d) 20 square units
- 21. To introduce "patterns" to Class I students, which activity is most suitable?
 - (a) Solving pattern problems on paper
 - (b) Using colored beads to create and extend patterns
 - (c) Lecturing on the importance of patterns
 - (d) Memorizing pattern sequences
- 22. The perimeter of a triangle with vertices A(0,0), B(8,0), and C(4,8) is:
 - (a) 16 units
 - (b) 20 units
 - (c) 24 units
 - (d) 28 units
- 23. To teach "money" to Class II students, which activity is most suitable?
 - (a) Using real coins and notes to simulate shopping

- (b) Solving money problems on paper
- (c) Lecturing on the history of money
- (d) Memorizing the value of coins and notes
- 24. The area of a square with vertices A(1,1), B(5,1), C(5,5), and D(1,5) is:
 - (a) 12 square units
 - (b) 16 square units
 - (c) 20 square units
 - (d) 25 square units
- 25. To assess understanding of "perimeter," which activity is most appropriate?
 - (a) Measuring the perimeter of objects using a ruler
 - (b) Calculating the perimeter of shapes using grid paper
 - (c) Lecturing on the importance of perimeter
 - (d) Memorizing the formula for perimeter
- 26. The equation of a circle with center (3,6) and radius 5 is:
 - (a) $(x-3)^2 + (y-6)^2 = 25$
 - (b) $(x+3)^2 + (y+6)^2 = 25$
 - (c) $(x-3)^2 + (y-6)^2 = 5$
 - (d) $(x+3)^2 + (y+6)^2 = 5$
- 27. To teach "multiplication as repeated addition" to Class III students, which activity is most suitable?
 - (a) Using objects to show groups of equal size
 - (b) Solving multiplication problems on paper
 - (c) Lecturing on the history of multiplication
 - (d) Memorizing multiplication tables
- 28. The perimeter of a rectangle with vertices A(0,0), B(9,0), C(9,2), and D(0,2) is:
 - (a) 18 units
 - (b) 20 units
 - (c) 22 units

- (d) 24 units
- 29. To introduce "division" to Class IV students, which activity is most suitable?
 - (a) Using objects to divide into equal groups
 - (b) Solving division problems on paper
 - (c) Lecturing on the history of division
 - (d) Memorizing division tables
- 30. The area of a triangle with vertices A(0,0), B(6,0), and C(3,6) is:
 - (a) 12 square units
 - (b) 15 square units
 - (c) 18 square units
 - (d) 21 square units
- 31. To assess understanding of "shapes," which activity is most appropriate?
 - (a) Drawing shapes from memory
 - (b) Sorting cut-outs of shapes
 - (c) Lecturing on the properties of shapes
 - (d) Memorizing the names of shapes
- 32. The perimeter of a square with vertices A(2,2), B(6,2), C(6,6), and D(2,6) is:
 - (a) 12 units
 - (b) 14 units
 - (c) 16 units
 - (d) 18 units
- 33. To teach "subtraction" to Class I students, which activity is most suitable?
 - (a) Using objects to show the removal of items
 - (b) Solving subtraction problems on paper
 - (c) Lecturing on the history of subtraction
 - (d) Memorizing subtraction facts

- 34. The perimeter of a rectangle with vertices A(0,0), B(6,0), C(6,1), and D(0,1) is:
 - (a) 12 units
 - (b) 14 units
 - (c) 16 units
 - (d) 18 units
- 35. To teach "measurement of capacity" to Class III students, which activity is most suitable?
 - (a) Using measuring cups to compare volumes of liquids
 - (b) Solving capacity problems on paper
 - (c) Lecturing on the history of measurement
 - (d) Memorizing units of capacity
- 36. The perimeter of a triangle with vertices A(0,0), B(6,0), and C(0,6) is:
 - (a) 12 units
 - (b) 15 units
 - (c) 18 units
 - (d) 21 units