CTET Mathematics Practice Test

Paper I (For Classes I-V)

General Instructions

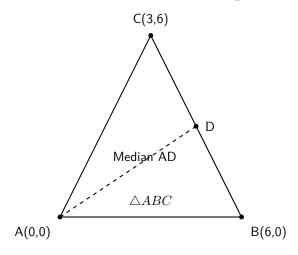
Practice Test - 24

- 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!

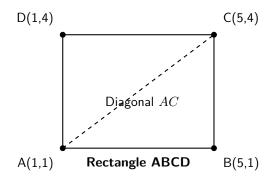
- 1. A teacher wants to teach the concept of "even and odd numbers" to Class II students. Which of the following activities is most effective?
 - (a) Asking students to list even and odd numbers from memory
 - (b) Using pairs of objects to show that even numbers can be grouped in twos, while odd numbers cannot
 - (c) Writing the definition of even and odd numbers on the board

- (d) Asking students to solve worksheets on even and odd numbers
- 2. The coordinates of a triangle are A(0,0), B(6,0), and C(3,6). A line is drawn from A to the midpoint of BC.



The coordinates of the midpoint of BC are:

- (a) (3, 0)
- (b) (4.5, 3)
- (c) (3, 3)
- (d) (4.5, 0)
- 3. Which of the following is the best method to teach the concept of "place value" to Class III students?
 - (a) Using abacus and base-10 blocks
 - (b) Asking students to write numbers in expanded form
 - (c) Giving a lecture on the history of the decimal system
 - (d) Asking students to memorize place value charts
- 4. The coordinates of a rectangle are A(1,1), B(5,1), C(5,4), and D(1,4).



The length of the diagonal AC is:

(a) 3 units

- (b) 4 units
- (c) 5 units
- (d) 6 units
- 5. A teacher wants to assess students' understanding of "fractions." Which of the following activities is most appropriate?
 - (a) Asking students to solve fraction problems on paper
 - (b) Using fraction circles to compare and add fractions
 - (c) Giving a lecture on the importance of fractions
 - (d) Asking students to memorize fraction tables
- 6. The smallest 4-digit number that can be formed using the digits 7, 0, 2, 5 (each digit used only once) is:
 - (a) 0257
 - (b) 2057
 - (c) 2570
 - (d) 2705
- 7. A teacher wants to teach the concept of "symmetry" to Class IV students. Which of the following activities is most suitable?
 - (a) Asking students to draw symmetrical shapes
 - (b) Using paper folding to demonstrate lines of symmetry
 - (c) Giving a lecture on the types of symmetry
 - (d) Asking students to memorize symmetrical shapes
- 8. The coordinates of a circle are given as center (1,2) and radius 3. The equation of the circle is:

(a)
$$(x-1)^2 + (y-2)^2 = 9$$

(b)
$$(x+1)^2 + (y+2)^2 = 9$$

(c)
$$(x-1)^2 + (y-2)^2 = 3$$

(d)
$$(x+1)^2 + (y+2)^2 = 3$$

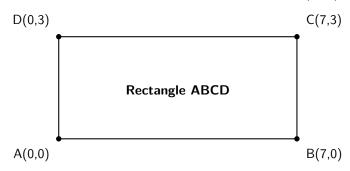
- 9. A teacher wants to teach the concept of "measurement of length" to Class I students. Which of the following activities is most suitable?
 - (a) Using a ruler to measure objects

- (b) Using non-standard units like hand spans and footsteps to measure objects
- (c) Giving a lecture on the history of measurement
- (d) Asking students to memorize standard units of length
- 10. The coordinates of a triangle are A(0,0), B(4,0), and C(0,4). 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. A teacher wants to introduce the concept of "data handling" to Class III students. Which of the following activities is most suitable?
 - (a) Asking students to create a bar graph using given data
 - (b) Using real-life examples to collect and organize data in a tally chart
 - (c) Giving a lecture on the importance of data handling
 - (d) Asking students to memorize types of graphs
- 12. The coordinates of a square are A(0,0), B(4,0), C(4,4), and D(0,4). The length of the diagonal BD is:
 - (a) $4\sqrt{2}$ units
 - (b) 6 units
 - (c) 8 units
 - (d) 16 units
- 13. A teacher wants to teach the concept of "addition with regrouping" to Class II students. Which of the following activities is most suitable?
 - (a) Using base-10 blocks to demonstrate regrouping
 - (b) Asking students to solve addition problems on paper
 - (c) Giving a lecture on the history of addition
 - (d) Asking students to memorize addition facts
- 14. The coordinates of a rectangle are A(0,0), B(3,0), C(3,5), and D(0,5). The perimeter of the rectangle is:

- (a) 12 units
- (b) 14 units
- (c) 16 units
- (d) 18 units
- 15. A teacher wants to assess students' understanding of "3D shapes." Which of the following activities is most appropriate?
 - (a) Asking students to draw 3D shapes
 - (b) Providing real-life objects like cubes, spheres, and cylinders for identification
 - (c) Giving a lecture on the properties of 3D shapes
 - (d) Asking students to memorize the names of 3D shapes
- 16. The coordinates of a triangle are A(0,0), B(5,0), and C(2,4). The area of the triangle is:
 - (a) 8 square units
 - (b) 10 square units
 - (c) 12 square units
 - (d) 16 square units
- 17. A teacher wants to teach the concept of "time" to Class II students. Which of the following activities is most suitable?
 - (a) Using a digital clock to show time
 - (b) Using an analog clock with movable hands to teach hours and minutes
 - (c) Giving a lecture on the history of clocks
 - (d) Asking students to memorize the time table
- 18. The coordinates of a circle are given as center (0,0) and radius 4. The equation of the circle is:
 - (a) $x^2 + y^2 = 16$
 - (b) $x^2 + y^2 = 8$
 - (c) $x^2 + y^2 = 4$
 - (d) $x^2 + y^2 = 2$
- 19. A teacher wants to teach the concept of "subtraction with borrowing" to Class III students. Which of the following activities is most suitable?

- (a) Using base-10 blocks to demonstrate borrowing
- (b) Asking students to solve subtraction problems on paper
- (c) Giving a lecture on the history of subtraction
- (d) Asking students to memorize subtraction facts
- 20. The coordinates of a rectangle are A(2,1), B(6,1), C(6,5), and D(2,5). The area of the rectangle is:
 - (a) 12 square units
 - (b) 16 square units
 - (c) 20 square units
 - (d) 24 square units
- 21. A teacher wants to introduce the concept of "patterns" to Class I students. Which of the following activities is most suitable?
 - (a) Asking students to solve pattern problems on paper
 - (b) Using colored beads to create and extend patterns
 - (c) Giving a lecture on the importance of patterns
 - (d) Asking students to memorize pattern sequences
- 22. The coordinates of a triangle are A(0,0), B(6,0), and C(3,6). The perimeter of the triangle is:
 - (a) 12 units
 - (b) 15 units
 - (c) 18 units
 - (d) 21 units
- 23. A teacher wants to teach the concept of "money" to Class II students. Which of the following activities is most suitable?
 - (a) Using real coins and notes to simulate a shopping experience
 - (b) Asking students to solve money problems on paper
 - (c) Giving a lecture on the history of money
 - (d) Asking students to memorize the value of coins and notes
- 24. The coordinates of a square are A(1,1), B(4,1), C(4,4), and D(1,4). The area of the square is:
 - (a) 6 square units

- (b) 9 square units
- (c) 12 square units
- (d) 16 square units
- 25. A teacher wants to assess students' understanding of "perimeter." Which of the following activities is most appropriate?
 - (a) Asking students to measure the perimeter of objects using a ruler
 - (b) Using grid paper to calculate the perimeter of shapes
 - (c) Giving a lecture on the importance of perimeter
 - (d) Asking students to memorize the formula for perimeter
- 26. The coordinates of a circle are given as center (2,3) and radius 5. The equation of the circle is:
 - (a) $(x-2)^2 + (y-3)^2 = 25$
 - (b) $(x+2)^2 + (y+3)^2 = 25$
 - (c) $(x-2)^2 + (y-3)^2 = 5$
 - (d) $(x+2)^2 + (y+3)^2 = 5$
- 27. A teacher wants to teach the concept of "multiplication as repeated addition" to Class III students. Which of the following activities is most suitable?
 - (a) Using objects to show groups of equal size
 - (b) Asking students to solve multiplication problems on paper
 - (c) Giving a lecture on the history of multiplication
 - (d) Asking students to memorize multiplication tables
- 28. The coordinates of a rectangle are A(0,0), B(7,0), C(7,3), and D(0,3).



The perimeter of the rectangle is:

(a) 14 units

- (b) 16 units
- (c) 20 units
- (d) 22 units
- 29. A teacher wants to introduce the concept of "division" to Class IV students. Which of the following activities is most suitable?
 - (a) Using objects to divide into equal groups
 - (b) Asking students to solve division problems on paper
 - (c) Giving a lecture on the history of division
 - (d) Asking students to memorize division tables
- 30. A teacher wants to teach the concept of "fractions" to Class III students. Which of the following activities is most suitable?
 - (a) Using fraction strips to compare and add fractions
 - (b) Asking students to solve fraction problems on paper
 - (c) Giving a lecture on the history of fractions
 - (d) Asking students to memorize fraction tables