## CTET Mathematics Practice Test

# Paper I (For Classes I-V)

### General Instructions

#### Practice Test - 28

- 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 introduce the concept of "fractions" to Class III students. Which activity is most effective?
  - (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

- 2. The coordinates of a triangle are A(0,0), B(8,0), and C(4,6). A line parallel to BC intersects AB at (2, y) and AC at (x, 1.5). 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 II students?
  - (a) Using an abacus to show tens and ones
  - (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(0,0), B(6,0), C(6,4), and D(0,4). The length of the diagonal AC is:
  - (a) 6 units
  - (b) 7 units
  - (c) 8 units
  - (d) 10 units
- 5. To assess understanding of "fractions," which activity 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 formed using the digits 3, 0, 7, 9 (each digit used only once) is:
  - (a) 0379
  - (b) 3079
  - (c) 3709
  - (d) 3790
- 7. To teach "symmetry" to Class III students, which activity 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 equation of a circle with center (3,4) and radius 6 is:
  - (a)  $(x-3)^2 + (y-4)^2 = 36$
  - (b)  $(x+3)^2 + (y+4)^2 = 36$
  - (c)  $(x-3)^2 + (y-4)^2 = 6$
  - (d)  $(x+3)^2 + (y+4)^2 = 6$
- 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) 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(5,0), and C(0,5). A line parallel to BC intersects AB at (1, y) and AC at (x, 1). The value of y is:
  - (a) 0.2
  - (b) 0.4
  - (c) 0.6
  - (d) 0.8
- 11. To introduce "data handling" to Class II students, which activity 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 length of the diagonal BD of a square with vertices A(0,0), B(5,0), C(5,5), and D(0,5) is:

- (a)  $5\sqrt{2}$  units
- (b) 7 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) 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 perimeter of a rectangle with vertices A(0,0), B(4,0), C(4,3), and D(0,3) is:
  - (a) 10 units
  - (b) 12 units
  - (c) 14 units
  - (d) 16 units
- 15. To assess understanding of "3D shapes," which activity 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 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
- 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 to teach hours and minutes
- (c) Giving a lecture on the history of clocks
- (d) Asking students to memorize the time table
- 18. The equation of a circle with center (0,0) and radius 7 is:
  - (a)  $x^2 + y^2 = 49$
  - (b)  $x^2 + y^2 = 14$
  - (c)  $x^2 + y^2 = 7$
  - (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) 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 area of a rectangle with vertices A(1,1), B(5,1), C(5,4), and D(1,4) is:
  - (a) 10 square units
  - (b) 12 square units
  - (c) 14 square units
  - (d) 16 square units
- 21. To introduce "patterns" to Class I students, which activity 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 perimeter of a triangle with vertices A(0,0), B(7,0), and C(3,7) is:
  - (a) 14 units
  - (b) 17 units

- (c) 21 units
- (d) 24 units
- 23. To teach "money" to Class II students, which activity 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 area of a square with vertices A(1,1), B(4,1), C(4,4), and D(1,4) is:
  - (a) 6 square units
  - (b) 9 square units
  - (c) 12 square units
  - (d) 16 square units
- 25. To assess understanding of "perimeter," which activity 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 equation of a circle with center (4,5) and radius 3 is:
  - (a)  $(x-4)^2 + (y-5)^2 = 9$
  - (b)  $(x+4)^2 + (y+5)^2 = 9$
  - (c)  $(x-4)^2 + (y-5)^2 = 3$
  - (d)  $(x+4)^2 + (y+5)^2 = 3$
- 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) 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 perimeter of a rectangle with vertices A(0,0), B(8,0), C(8,2), and D(0,2) is:
  - (a) 16 units
  - (b) 18 units
  - (c) 20 units
  - (d) 22 units
- 29. To introduce "division" to Class IV students, which activity 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. The area of a triangle with vertices A(0,0), B(5,0), and C(2,5) is:
  - (a) 10 square units
  - (b) 12.5 square units
  - (c) 15 square units
  - (d) 17.5 square units
- 31. To assess understanding of "shapes," which activity is most appropriate?
  - (a) Asking students to draw shapes from memory
  - (b) Providing cut-outs of shapes and asking students to sort them
  - (c) Giving a lecture on the properties of shapes
  - (d) Asking students to memorize the names of shapes
- 32. The perimeter of a square with vertices A(2,2), B(5,2), C(5,5), and D(2,5) is:
  - (a) 10 units
  - (b) 12 units
  - (c) 14 units
  - (d) 16 units
- 33. To teach "subtraction" to Class I students, which activity is most suitable?

- (a) Using objects to show the removal of items
- (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
- 34. The perimeter of a rectangle with vertices A(0,0), B(5,0), C(5,2), and D(0,2) is:
  - (a) 10 units
  - (b) 12 units
  - (c) 14 units
  - (d) 16 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) Asking students to solve capacity problems on paper
  - (c) Giving a lecture on the history of measurement
  - (d) Asking students to memorize units of capacity
- 36. The perimeter of a triangle with vertices A(0,0), B(5,0), and C(0,5) is:
  - (a) 10 units
  - (b) 12 units
  - (c) 14 units
  - (d) 15 units