

CTET Mathematics Practice Test

Paper I (For Classes I–V)

General Instructions

Practice Test - 12

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. The product of the successor of the smallest 3-digit number and the predecessor of the largest 2-digit number is:
 - (a) 9999
 - (b) 10099
 - (c) 10098
 - (d) 9899

2. A teacher is conducting a diagnostic test to identify specific learning gaps in addition. Which type of error analysis would be most beneficial?
- (a) Counting the total number of correct answers.
 - (b) Comparing the student's score with the class average.
 - (c) Identifying patterns in incorrect answers (e.g., consistent failure to carry over in addition).
 - (d) Assessing the student's handwriting and neatness.
3. If a number is multiplied by 1.5 and then 4.5 is subtracted from the product, the result is 12. What is the number?
- (a) 11
 - (b) 8
 - (c) 13
 - (d) 14
4. A cuboid has vertices at coordinates $(1, 1, 1)$, $(5, 1, 1)$, $(5, 4, 1)$, $(1, 4, 1)$, and corresponding upper vertices at $(1, 1, 6)$, $(5, 1, 6)$, $(5, 4, 6)$, $(1, 4, 6)$. What is the volume of this cuboid in cubic units?
- (a) 60
 - (b) 20
 - (c) 48
 - (d) 80
5. The number of minutes in 5 hours and 20 minutes, when converted into seconds, is:
- (a) 19200
 - (b) 20400
 - (c) 18000
 - (d) 17500
6. What is the sum of all the prime numbers between 20 and 30?
- (a) 50
 - (b) 52
 - (c) 29
 - (d) 53

7. Which of the following activities best promotes the concept of **tessel-
lation** in a primary classroom?
- (a) Drawing different sizes of circles.
 - (b) Measuring the perimeter of various triangles.
 - (c) Arranging identical geometric tiles to cover a floor space without gaps or overlaps.
 - (d) Folding paper to find lines of symmetry.
8. A teacher is preparing a lesson plan for teaching the concept of equivalent fractions. Which manipulative would be most appropriate?
- (a) Abacus
 - (b) Dice
 - (c) Fraction Strips or Fraction Circles
 - (d) Place Value Chart
9. A circular flower bed has a diameter of 7 meters. What is the approximate length of the boundary of the flower bed (circumference)? (Use $\pi \approx \frac{22}{7}$)
- (a) 22 meters
 - (b) 44 meters
 - (c) 11 meters
 - (d) 38.5 meters
10. Simplify the fraction: $\frac{3}{5} - \frac{1}{10} + \frac{1}{2}$
- (a) $\frac{7}{10}$
 - (b) $\frac{9}{10}$
 - (c) $\frac{4}{5}$
 - (d) 1
11. A tank is filled with 300 liters of water. If water is leaking out at a constant rate of 200 milliliters per minute, how much water (in liters) will remain in the tank after 3 hours?
- (a) 24 liters
 - (b) 264 liters
 - (c) 224 liters
 - (d) 296 liters

12. Which statement reflects a common challenge in teaching money concepts to primary students?
- (a) Students easily grasp the concept of change and denominations.
 - (b) The abstract value of money is difficult to connect with physical coins and notes.
 - (c) Using play-money in the classroom is always counterproductive.
 - (d) Money problems are exclusively complex mathematical calculations.
13. A school library has 345 science books, 215 math books, and 140 history books. What is the ratio of history books to math books in its simplest form?
- (a) 7 : 16
 - (b) 14 : 21
 - (c) 1 : 2
 - (d) 2 : 3
14. What is the result when 1.025 is multiplied by 1000 and then 10.25 is subtracted from the product?
- (a) 1014.75
 - (b) 101.475
 - (c) 1004.75
 - (d) 10047.5
15. In the context of mathematics education, what does the 'Spiral Curriculum' approach primarily aim to achieve?
- (a) Teaching advanced topics only once the foundation is fully mastered.
 - (b) Reintroducing key concepts multiple times at increasing levels of complexity.
 - (c) Covering all topics only at a superficial level.
 - (d) Focusing solely on speed and accuracy in calculation.
16. The weight of an object is 15 kg and 75 grams. If four such identical objects are weighed together, what is the total weight in kilograms?
- (a) 60.3 kg

- (b) 60.75 kg
 - (c) 60.075 kg
 - (d) 6.075 kg
17. Which of the following numbers is divisible by both 4 and 9?
- (a) 1344
 - (b) 1528
 - (c) 2160
 - (d) 1192
18. A student is drawing a bar graph to represent the number of students in different sections of a class. The sections are A, B, C, D with counts 35, 40, 30, 45 respectively. If the scale used is 1 unit = 5 students, what is the height of the bar for Section B?
- (a) 8 units
 - (b) 10 units
 - (c) 9 units
 - (d) 7 units
19. Which pair of coordinates represents a line segment that is perfectly vertical?
- (a) (2, 3) and (3, 2)
 - (b) (4, 1) and (4, 6)
 - (c) (5, 5) and (1, 5)
 - (d) (0, 0) and (5, 5)
20. A worker earns 850 units per day. If he works for 24 days in a month, and his monthly expenditure is 18,000 units, how much does he save in that month?
- (a) 2400 units
 - (b) 2600 units
 - (c) 2800 units
 - (d) 20400 units
21. The process of moving from **concrete examples to generalizations** (e.g., observing that $2 \times 3 = 6$ and $3 \times 2 = 6$, and concluding that $a \times b = b \times a$) is known as:

- (a) Deductive Reasoning
 - (b) Rote Learning
 - (c) Inductive Reasoning
 - (d) Drill and Practice
22. If $P = 15 \times (4 - 2)$ and $Q = 15 \times 4 - 2$, then the value of $Q - P$ is:
- (a) 30
 - (b) 28
 - (c) 4
 - (d) 8
23. How many lines of symmetry does a square have?
- (a) 2
 - (b) 3
 - (c) 4
 - (d) 8
24. The total number of edges in a combined figure formed by placing a cube exactly on top of a cuboid is: (Assume the base edges of the cube align perfectly with the top face edges of the cuboid).
- (a) 20
 - (b) 24
 - (c) 18
 - (d) 16
25. A teacher observes that a student often uses fingers to count for basic addition facts (e.g., $7 + 5$). This suggests the student is primarily at which stage of mathematical understanding?
- (a) Formal Stage (Abstract)
 - (b) Iconic Stage (Pictorial)
 - (c) Concrete/Operational Stage
 - (d) Algorithmic Stage
26. A rope of length 18 meters is cut into pieces, each $\frac{3}{4}$ meter long. How many pieces of rope are obtained?
- (a) 24

- (b) 18
 - (c) 12
 - (d) 30
27. The number of tens in 1980 is:
- (a) 1980
 - (b) 198
 - (c) 80
 - (d) 8
28. Which activity would be a relevant use of **ICT** (Information and Communication Technology) for teaching number patterns to primary students?
- (a) Reading a physical storybook about numbers.
 - (b) Using a simple spreadsheet program to generate number sequences and identify the rule.
 - (c) Drawing patterns on the blackboard with chalk.
 - (d) Counting manipulatives like beads and buttons.
29. A car travels 12 km in 15 minutes. If the speed remains constant, how many kilometers will it travel in 2.5 hours?
- (a) 100 km
 - (b) 120 km
 - (c) 125 km
 - (d) 96 km
30. A large drum contains 25 liters of paint. If 25% of the paint is used, how many milliliters of paint remain in the drum?
- (a) 18750 ml
 - (b) 6250 ml
 - (c) 18.75 ml
 - (d) 15000 ml
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