

BUDHA DAL PUBLIC SCHOOL PATIALA
FIRST TERM EXAMINATION (20 September 2025)
MATHEMATICS

Class - VI

(Set - A)

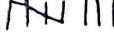
Time Allowed: 3 hours

Maximum Marks: 80

Instructions:

1. All questions are compulsory.
2. Section - A : Q.No. 1 to 10 in the form of MCQ carry 1 mark each
3. Section - B : Q.No. 11 to 20 carry 2 marks each
4. Section - C : Q.No. 21 to 30 carry 3 marks each
5. Section - D : Q.No. 31 to 35 carry 4 marks each

SECTION-A

1. Write the Predecessor of the number 7889 1
a) 7890 b) 7888 c) 7887 d) 7891
2. Form a greatest 4 digit number using the digit 1, 7, 5, 3 1
a) 3571 b) 7531 c) 7351 d) 7135
3. Complete the series 2, 4, 6, ___, ___, 12 1
a) 7, 8 b) 10, 12 c) 8, 10 d) 11, 12
4. Which of the following number is a palindrome 1
a) 633 b) 363 c) 663 d) 336
5. A number having more than two factors is called _____ 1
a) Prime number b) Co-prime number
c) Composite number d) Twin Prime Number
6. Which of the following pair are twin-prime? 1
a) (7, 9) b) (5, 7) c) (13, 15) d) (19, 21)
7. Two numbers having only 1 as a common factors are called _____. 1
a) Co-prime Number b) Twin-Prime c) Prime Number d) Composite Number
8. In Tally marks, how we represents  1
a) 5 b) 8 c) 4 d) 10
9. A quadrilateral having all sides equal is called _____. 1
a) Rectangle b) Square c) Parallelogram d) Trapezium
10. If ☺ = 4 items then ☺☺☺☺ is _____. 1
a) 20 b) 16 c) 12 d) 8

SECTION-B

11. How many whole numbers lie between 52 and 67? 2

12. Study the pattern and write the next two steps

$$\begin{aligned}1 \times 1 &= 1 \\11 \times 11 &= 121 \\111 \times 111 &= 12321\end{aligned}$$

13. Write two examples of 4 digit number that are palindromes.

14. Read the number in each cell and colour the cell if it is a supercell.

| | | | | | | |
|----|-----|-----|----|-----|-----|-----|
| 23 | 290 | 113 | 89 | 320 | 453 | 132 |
|----|-----|-----|----|-----|-----|-----|

15. State True or False

a) Raw data is the organized form of data.
b) The arrangement of numbers in ascending or descending order is called an array.

16. Teacher asked the students about the sizes of shoes they wear. She noted the data on the board.

| | | | | | | |
|---|---|---|---|---|---|---|
| 4 | 5 | 3 | 4 | 3 | 5 | 4 |
| 5 | 5 | 4 | 5 | 6 | 4 | 3 |
| 4 | 6 | 4 | 5 | 7 | 5 | 6 |

Prepare a tally marks frequency table of above data.

17. Write seven consecutive composite numbers between 1 and 100.

18. Is 15 and 37 pair of co-prime number? Show by finding factors.

19. Construct an angle of 90° with compass.

20. Draw a line - segment of 8cm and construct its perpendicular bisector.

SECTION-C

21. Find the missing number:

a) 1, 8, 27, __, __ b) 5, 7, 12, 14, __, __

22. Show the steps to make number 2389 reach the Kaprekar constant?

23. Write 2 examples each of date and time that shows palindromic numbers.

24. Find the prime factorization of following numbers.

a) 512 b) 1331

25. True/ False 3

- 1 is neither prime nor composite number.
- 13 and 17 are twin prime number
- 4 is smallest composite number

26. a) Find the HCF of 36, 72, 108 3
b) Find the LCM of 20, 25, 30

27. Using divisibility rule check that following number is divisible by 6 3
64206

28. Prepare a pictograph of following data; 3

| Month | Jan | Feb | March | April | May | June |
|----------------------|-----|-----|-------|-------|-----|------|
| No. of vehicles sold | 300 | 250 | 400 | 100 | 150 | 350 |

1 = 100 vehicles

29. The number of items sold by shopkeeper on six consecutive days of week is as follows: 3

| Day | Mon | Tue | Wed | Thu | Fri | Sat |
|------------------|-----|-----|-----|-----|-----|-----|
| No. of item sold | 100 | 150 | 300 | 250 | 200 | 50 |

Draw a bar graph to represent information.

30. Construct an angle of 60° . Construct its angle bisector. 3
SECTION-D

31. Find the product of Successor and Predecessor of Smallest 5 digit number. 4

32. Construct a square ABCD with side 6cm. 4

33. A carpenter has wooden planks of length 54 cm, 72 cm and 90 cm. What is the maximum length he can cut these planks into with no wastage? 4

34. The following pictograph shows the number of absentees in a class of 30 students during the previous week. 4

| Days | Number of absentees | $\Delta = 2$ Absentees |
|-----------|--|------------------------|
| Monday | $\Delta \Delta \Delta \Delta \Delta$ | |
| Tuesday | $\Delta \Delta \Delta \Delta$ | |
| Wednesday | $\Delta \Delta$ | |
| Thursday | $\Delta \Delta \Delta \Delta$ | |
| Friday | Δ | |
| Saturday | $\Delta \Delta \Delta \Delta \Delta \Delta \Delta$ | |

On the basis of above data answer the following questions.

- a) On which day maximum number of students were absent?
- b) Which day had minimum number of absentees?
- c) Which days had same number of absentees?
- d) What was the total number of absentees in that week?

35. A role play was conducted in class 6 and different roles were assigned to different students, Based on these roles, answer the following questions:

- 1) Number which have only two factors, 1 and number itself is called 4
 - a) Co-Prime number
 - b) Composite number
 - c) Prime number
 - d) Twin-prime number
- 2) 59 is an _____ number.
 - a) Odd number
 - b) Even number
- 3) Number 51 is _____ number
 - a) Prime number
 - b) Composite number
- 4) Two prime numbers whose difference is 2 are called _____
 - a) Co-prime numbers
 - b) Prime numbers
 - c) Twin-prime numbers
 - d) Composite numbers

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5. Section - D : Q.No. 31 to 35 carry 4 marks each

SECTION-A

1. Write the Successor of the number 9888 1
 a) 9887 b) 9989 c) 9889 d) 9890
2. Form a smallest 4 digit number using the digit 7, 1, 5, 2 1
 a) 1527 b) 1257 c) 1725 d) 1275
3. Complete the series 3, 6, 9, 12, __, __ 1
 a) 15, 18 b) 14, 16 c) 18, 20 d) 13, 16
4. Which of the following number is palindrome 1
 a) 581 b) 585 c) 185 d) 851
5. A number having more than two factors is called ____ 1
 a) Prime number b) Co-prime number
 c) Composite number d) Twin Prime Number
6. Which of the following pair is co-prime? 1
 a) 20, 55 b) 4, 15 c) 13, 39 d) 18, 20
7. Pair of prime numbers having a difference of 2 are called ____ 1
 a) Co-prime Numbers b) Twin-Prime numbers c) Composite Number d) Odd Number
8. In Tally marks,   || denotes ____ 1
 a) 10 b) 12 c) 14 d) 8
9. If Δ = 5 items, then $\Delta \Delta \Delta$ = ____ 1
 a) 10 items b) 15 items c) 3 items d) 25 items
10. A quadrilateral having opposite sides equal and each angle is 90^0 . 1
 a) Square b) Rectangle c) Parallelogram d) Rhombus

SECTION-B

11. How many whole numbers lie between 57 and 72? 2

12. Study the pattern and write the next two steps

2

$$1 \times 8 + 1 = 9$$

$$1 \times 9 + 1 = 10$$

$$1 \times 10 + 1 = 11$$

13. Write a date and time that shows palindromic numbers.

2

14. Read the number in each cell and colour the cell if it is a supercell.

2

| | | | | | | |
|-----|-----|-----|-----|-----|-----|----|
| 132 | 418 | 318 | 419 | 519 | 203 | 98 |
|-----|-----|-----|-----|-----|-----|----|

15. Draw tally marks for the given numbers

2

a) 22 b) 18 c) 24 d) 17

16. The numbers 13 and 31 are prime numbers. Both these numbers have same digits 1 and 3. Find 2 more such pairs of prime numbers upto 100.

17. The data shows number of ice creams sold by ice cream vendor in different months. Draw a 2 pictograph to represent the data

Key : $1\Delta = 50$ ice creams

| Month | Jan | Feb | March | April | May |
|------------|-----|-----|-------|-------|-----|
| Ice Creams | 150 | 200 | 250 | 350 | 400 |

18. State True or False

2

a) 1 is the factor of every number.
b) All even numbers are composite numbers.

19. Construct an angle of 60° with compass.

2

20. Draw a line – segment of 10cm and construct its perpendicular bisector.

2

SECTION-C

21. Find the missing number:

3

a) 1, 4, 9, 16, __, __ b) 1, 2, 3, 5, 8, 13, 21 __, __

22. Show the steps to make number 6283 reach the Kaprekar constant?

3

23. Write three 5 – digit numbers that are palindromes.

3

24. Find the prime factorization of following number.

3

a) 1000 b) 96

25. Fill in the blanks 3

- The multiple of 2 is also called _____
- The only prime number which is also even is _____
- _____ is a unique number

26. a) Find the HCF of 54, 72, 90 3
 b) Find the LCM of 16, 30, 42

27. Using divisibility rules, check whether the following number is divisible by 6 3
 34092

28. The blood groups of 20 students are recorded as under : 3

| | | | | |
|----|----|----|----|----|
| A | AB | A | A | A |
| B | O | AB | O | A |
| O | B | B | A | AB |
| AB | A | O | AB | AB |

Arrange the information in a frequency table using Tally marks.

29. The data shows number of bedsheets manufactured in a factory on different days of a week. 3
 Draw a bar graph to represent the data :

| Day | Mon | Tue | Wed | Thu | Fri | Sat |
|------------------|-----|-----|-----|-----|-----|-----|
| No. of bedsheets | 600 | 750 | 250 | 400 | 850 | 500 |

30. Construct an angle of 90° . Construct its bisector also. 3
 SECTION-D

31. Construct a rectangle PQRS with length 6 cm and breadth 4 cm. 4

32. Find the product of successor and predecessor of largest 4 – digit number. 4

33. A library has 30 history books, 45 Science books and 60 Maths books. They want to arrange them on shelves so that each shelf contains an equal number of books of each subject. What is the maximum number of books they can place on each shelf? 4

34. The pictograph shows the sale of electric bulbs in a week.

Key : O = 100 bulbs

| Day | Mon | Tue | Wed | Thu | Fri | Sat |
|-------------------|-------|-------|-------|-------|-------|-------|
| No. of bulbs sold | O O O | O O O | O O O | O O O | O O O | O O O |
| | O O O | O | O O O | O O O | O O O | O O O |
| | | | | | | |

On the basis of above data answer the following questions.

- a) How many bulbs were sold on Wednesday?
- b) On which day was minimum bulbs sold?
- c) On which days were same number of bulbs sold?
- d) How many total bulbs were sold during that week?

35. A role play was conducted in class 6 and different roles were assigned to different students. Based on these roles, answer the following questions:

- 1) Number 29 is a
 - a) Prime number
 - b) Composite number
 - c) Perfect number
 - d) Twin-prime number
- 2) 18 is an _____ number
 - a) Even number
 - b) Odd number
- 3) Number which have only two factors, 1 and number itself is called
 - a) Co-Prime numbers
 - b) Prime numbers
 - c) Composite numbers
 - d) Twin prime numbers
- 4) Two prime numbers whose difference is 2 are called _____
 - a) Co-prime numbers
 - b) Prime numbers
 - c) Composite numbers
 - d) Twin prime numbers

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