## MATHEMATICS CLASS VI

## Class 06 - Mathematics

Time Allowed: 3 hours

1. One crore is similar to
a) 10 hundreds
b) 100 lakhs
c) 100 thousands
d) 1000 lakhs
2. The temperature at 12 noon was $10^{\circ} \mathrm{C}$ above zero. If it decreases at the rate of $2^{\circ} \mathrm{C}$ per hour until midnight, at what time would the temperature be $8^{\circ} \mathrm{C}$ below zero?
a) 8:00 PM
b) $11: 00 \mathrm{PM}$
c) $9: 00 \mathrm{PM}$
d) $10: 00 \mathrm{PM}$
3. Which natural number has no predecessor?
a) 1
b) 2
c) None of these
d) 0
4. Which of the following statements is false?
a) The HCF of two distinct prime numbers is 1
b) The HCF of two consecutive even numbers is 2
c) The HCF of an even and an odd number is even.
d) The HCF of two co-prime numbers is 1
5. Every prime number except $\qquad$ is odd.
a) 7
b) 5
c) 2
d) 3
OR

Which of the following is the smallest prime number?
a) 2
b) 0
c) 1
d) 3
6. Write all the factors of 24
7. In the figure given below, the ray will be named as $\qquad$

a) M
b) N
c) OB
d) MN
8. How many end points a ray have?

OR
Draw any circle and mark a sector.
9. There are $\qquad$ main directions.
a) 3
b) 2
c) 4
d) None of these
10. On the number line, the integer 5 is located
a) to the left of 0
b) to the left of 1
c) to the right of 0
d) to the left of -2
11. The least integer lying between -10 and -15 is
a) -14
b) -11
c) -15
d) -10
12. Which of the following fractions is the smallest?
a) $\frac{11}{10}$
b) $\frac{11}{9}$
C) $\frac{11}{6}$
d) $\frac{11}{7}$
13. Express 6.03 as a mixed fraction.
14. State True or False:
(i) Sum of any two sides of a triangle is greater than the third side.
15. Fill in the blanks:
(i) The greatest negative integer is $\qquad$ .
16. Estimate: 5,673-436.

Write 203841 in expanded form.
17. Match the following

| Column A | Column B |
| :--- | :--- |
| 1. Commutative property | a. $(\mathrm{a} \times \mathrm{b}) \times \mathrm{c}=\mathrm{a} \times(\mathrm{b} \times \mathrm{c})$ |
| 2. Associative Property | b. $\mathrm{a}(\mathrm{b}+\mathrm{c})=\mathrm{ab}+\mathrm{ac}$ |
| 3. Identity for multiplication | c. $\mathrm{a}+\mathrm{b}=\mathrm{b}+\mathrm{a}$ |
| 4. Distributive Property | d. $\mathrm{a} \times 1=\mathrm{a}$ |

18. Using divisibility tests, determine if 70169308 is divisible by 11.
19. From the figure identify
a. the centre of circle.
b. three radii
c. a diameter

20. Using number line write the integer which is 6 less than 2 .
21. Rewrite the fractions in the simplest form $\frac{44}{72}$
22. Read the following numbers and answer the questions below :
(a) 527864
(b) 95432
(c) 18950049
(d) 70002509 .
(i) Which is the smallest number?
(ii) Which is the greatest number?
(iii) Arrange these in ascending and descending order.
23. Find the least number which should be added to 10000 so that the sum is exactly divisible by 237 .

OR
Estimate each of the following products by rounding off each number to nearest tens:
i. $87 \times 32$
ii. $311 \times 113$
iii. $3239 \times 28$
24. Here is a rough sketch of a quadrilateral PQRS.


## State

i. Two pairs of opposite sides $\qquad$ .
ii. Two pairs of adjacent angles $\qquad$ _.
iii. Two diagonals $\qquad$ .
25. Measurement of side of triangle below, Identify type of triangle :
a. $6 \mathrm{~cm}, 8 \mathrm{~cm}, 6 \mathrm{~cm}$
b. $4 \mathrm{~cm}, 4 \mathrm{~cm}, 4 \mathrm{~cm}$
c. $4 \mathrm{~cm}, 3 \mathrm{~cm}, 2 \mathrm{~cm}$
26. Subtract the sum of -5020 and 2320 from -709 .
27. Give a rough estimate (by rounding off to nearest hundreds) and also a closer estimate (by rounding off to nearest tens):
$439+334+4,317$
28. In a bouquet, there are 11 roses 9 gladioli. In 12 bouquets, how many flowers are there? Write in mathematical statement for this.
29. Find the least number which when divided by 650 , 350 or 750 always leaves a remainder 5 every time.
30. What is the heaviest standard weight which a vegetable seller must have with him to weigh $1.5 \mathrm{Kg}, 3 \mathrm{Kg}$ and 3.5 [5] Kg?

## OR

Using divisibility tests, determine if the no. 14560 is divisible by
a. 4
b. 8
31. Find the value of $x$.

32. In a hill station, the temperature recorded at midnight was $-2^{\circ} \mathrm{C}$. If the temperature rises by $9^{\circ} \mathrm{C}$ the next day afternoon, and again drops by $11^{\circ} \mathrm{C}$ at $10 \mathrm{p} . \mathrm{m}$. What was the temperature recorded at 10 p.m.?
33. A rectangular sheet of paper is $12 \frac{1}{2} \mathrm{~cm}$ long and $10 \frac{2}{3} \mathrm{~cm}$ wide. Find the perimeter.
a. Rafiq completes reading $\frac{1}{4}$ of a book. Ria completes 240 pages of the same book of 500 pages. Who completes it by reading more?
b. What is $\frac{1}{4}$ th of a leap year?

## Question No. 34 to 38 are based on the given text. Read the text carefully and answer the questions:

Ramesh had 20 pencils, Sheela had 50 pencils and Jamaal had 80 pencils. After 4 months, Ramesh used up 10 pencils, Sheela used up 25 pencils and Jamaal used up 40 pencils.

34. To find an $\qquad$ fraction of a given fraction, you may multiply both the numerator and the denominator of the given fraction by the same number.
35. What fraction did Ramesh use up?
a) $\frac{1}{2}$
b) $\frac{2}{5}$
c) $\frac{3}{4}$
d) $\frac{3}{5}$
36. What fraction did Sheela use up?
a) $\frac{1}{2}$
b) $\frac{1}{5}$
c) None of these
d) $\frac{1}{10}$
37. What fraction did Jamal use up?
a) $\frac{4}{5}$
b) $\frac{3}{5}$
c) $\frac{1}{2}$
d) $\frac{3}{10}$
38. Each has used up an equal fraction of her/his pencils.
a) True
b) False

