

Solve the equation using transposition method:

- 1)  $b + 6 = 13$
- 2)  $x - 7 = 2$
- 3)  $f - 0.6 = 2.4$
- 4)  $x - 24 = 16$
- 5) 14 more than a number equals 18. Find the number.
- 6) What is the solution of equation  $-6 + s = -12$
- 7) 17 mangoes are added to a basket of mangoes to make the total 100. How many mangoes were there in the basket before the addition?
- 8) Write in algebraic expression :
  - a) 8 less than  $m$
  - b) 7 divided into  $y$  groups
- 9) Write the simplest form of the ratio 16:64
- 10) Answer the following questions: (steps must be shown)
  - a) If  $a = 4$ ,  $b = 3$ ,  $c = 6$  find the value of
    - (i)  $7a - bc$
    - (ii)  $2a + 4c$
  - b) If 7 times a number is 126. What is the number
- 11) Answer the following questions: (steps must be shown)
  - a) The cost of 5 kg of flour is Rs 370. What is the cost of 12 kg of flour?
- 12) Find the value of the following expression if  $a = 3$ ,  $b = 4$ 
  - (i)  $5a - 2b$
  - (ii)  $4ab + 10$
  - (iii)  $2ab + 7b - 10$
  - (iv)  $4ab - 3a - 2$
- 13) Find the value of the following expression if  $a = 6$ ,  $b = 4$  and  $c = 2$ 
  - (i)  $3b - 2(c + a)$
  - (ii)  $c(2a + b - 3)$
- 14) find the value of the following expression if  $a = 4$ 
  - (i)  $3a + 2$
  - (ii)  $\frac{4a}{2}$
- 15) Fill in the blanks:

- a) The sum of the successor and predecessor of 1000 is \_\_\_\_\_.
- b) The roman numeral representing the least 3 digit number is \_\_\_\_\_.
- c)  $(793 + 430) + 412 = 793 + (\text{_____} + 412)$
- 16) Do the following: (Working must be shown)
- a) Write the Roman Numeral for the following 89 and 37
- b) Solve using distributive property :  $8 \times 105$
- c) Estimate:  $7789 - 539$
- 17) Do the following: (working must be shown)
- What must be added 49, 62, 739 to make it equal to 5 crore? Express the answer in words in Indian and International system.
- 18) If  $x = 2$ ,  $y = -3$  and  $z = 1$ . Find the value of
- a)  $x + y + z$
- b)  $3x + 4y$
- 19) Write in simplest form
- a) 12 kg : 100g
- b) 150 : 300
- 20) Which ratio is greater? 19 :12 or 16:24
- 21) Solve
- a)  $y + 3 = 16$
- b)  $x - 9 = 12$
- c)  $4 - x = 6$
- d)  $3x = 21$
- 22) 14 packets of milk weigh 7 kg. how many packets of milk make 17 kg?
- 23) Frame an equation and solve:
- a) A number divided by 12 equals 6
- b) 8 times a number equals 48
- 24) Write an algebraic expression:
- a) Multiply the sum of a and b by p
- b) The product of x and 8 added to the quotient of y and 3.
- 25) Estimate the division by rounding each number to the nearest ten:
- a)  $837 \div 24 = \text{_____}$
- b)  $409 \div 11 = \text{_____}$
- c)  $545 \div 46 = \text{_____}$
- d)  $963 \div 22 = \text{_____}$

e)  $275 \div 41 =$  \_\_\_\_\_

f)  $182 \div 18 =$  \_\_\_\_\_

g)  $715 \div 89 =$  \_\_\_\_\_

h)  $774 \div 13 =$  \_\_\_\_\_

26) Answer the following:

a) Write the first four non-zero multiples of 13

b) Represent -7 on the number line

c) Evaluate  $|-5| + (6 - 2) \div 4 \times 2$

27) Do the following: ( steps must be shown)

a) Solve:  $-70 + (-9) + 14 - (-6)$

b) The LCM of two numbers is 28. Their sum is 11. What are the numbers?

c) Arrange in descending order: - 216, -82, 221, -5, - 123, 123, -8

28) Answer the following: (steps must be shown)

The length, breadth and height of a room are 825 cm, 675 cm and 450 cm respectively. Find the maximum length of the tape that can measure the three dimensions of the room on an exact number of times.

### Negative numbers and integers

29) The predecessor of  $-|-5|$  is \_\_\_\_\_

30) Integers lying between (- 4) and 3 which are divisible by 2 are \_\_\_\_\_

31) Sum of integers are 3870. If one of them is  $- 2567$ . Find the other.

32) Evaluate  $|7 \times 5| \div |-5|$

33) Find  $(-173) + 234 + (-190) - (-205)$

34) Subtract the sum of  $- 45$  and  $30$  from  $- 23$

### Fractions

35) Write an equivalent fraction of  $\frac{3}{7}$

36) Mary jumped 2 metres in a broad jump. Rani jumped  $\frac{5}{7}$  metres less than Mary. How long was Rani's jump?

37) Divide  $2\frac{2}{7} \div 1\frac{2}{3}$

38) Arrange in descending order:  $\frac{3}{4}, \frac{7}{8}, \frac{5}{12}, \frac{11}{24}$

39) Simplify :  $2\frac{3}{5} + 1\frac{3}{10} - 3\frac{2}{15}$

### BASIC GEOMETRICAL IDEAS

40) The distance around a circle is called its \_\_\_\_\_.

41) If the longest chord of a circle is 8 cm, the length of its radius is \_\_\_\_\_.

- 42) Draw parallel lines and perpendicular lines.  
43) Draw a quadrilateral family.  
44) Draw a circle of radius 5 cm and mark  
(a) Its center as O.  
(b) Diameter AB  
(c) Secant CD  
(d) A quadrant BOX

### KNOWING OUR NUMBERS

- 45) Write 39 in Roman numerals  
46) Write 84 in Roman numerals  
47) Write 53 in Roman numerals  
48) Write 97 in Roman numerals  
49) Estimate  $895 \times 89$   
50) Estimate  $983 \times 95$

### Whole numbers

- 51)  $0 \div 63 =$  \_\_\_\_\_  
52)  $786 \times 0 =$  \_\_\_\_\_  
53) Find the sum by suitable rearrangement:  $837 + 208 + 363$   
54) Find the product by suitable rearrangement:  $2 \times 1768 \times 50$   
55) Multiply by suitable arrangement: 250 , 8, 4, 7  
56) Find  $4 - 2$  using the number line.

### PLAYING WITH NUMBERS

- 57) Solve :  $80 + [ 20 + \{ 175 \div 5 - (28 - 16 \div 4) \div 6 \}]$   
58) Find the LCM of 48, 72, 108 and 95 by division method.  
59) Find the HCF of 660, 1020, 1380 by continued division method.  
60) Define twin prime, co prime, prime triplet and perfect number with an example.  
61) Replace the (\*) by the smallest number so that  $63(*)72$  is divisible by 3

### FRACTIONS

- 62) Write 3 equivalent fractions of  $\frac{100}{250}$   
63) Convert into simplest form  $\frac{48}{64}$   
64) Arrange in ascending and descending order  $\frac{1}{3}, \frac{1}{6}, \frac{2}{9}, \frac{5}{12}$

65) Add :

(i)  $\frac{2}{3} + \frac{5}{12} + \frac{3}{21}$

(ii)  $\frac{5}{7} + \frac{3}{5}$

(iii)  $6 + \frac{7}{11}$

66) Subtract:

(i)  $\frac{2}{5} - \frac{3}{20}$

(ii)  $\frac{7}{10} - \frac{5}{9}$

(iii)  $13 - \frac{2}{5}$

67) Multiply:

(i)  $\frac{18}{35} \times \frac{70}{36}$

(ii)  $\frac{225}{125} \times \frac{100}{200}$

68) Divide:

(i)  $\frac{6}{12} \div \frac{42}{108}$

(ii)  $\frac{200}{100} \div \frac{800}{1000}$

69) Find:

(i)  $\frac{1}{5}$  of a complete angle

(ii)  $\frac{2}{3}$  of a right angle

(iii)  $\frac{3}{2}$  of a leap year

70) Find the sum and the product of the mixed numbers  $2\frac{1}{4}$  and  $1\frac{4}{5}$ . What do you notice?

71) The distance between Delhi and Dehradum is about 280 km. Reena travelled  $\frac{3}{4}$  of the distance by train and the rest by car. How many kilometers did Reena travel by train.

## Revision Paper

### **I. One mark questions:**

- 1) The sum of -3 and 8
- 2)  $25 + 13 + 93 + 7 = 100 + \underline{\hspace{2cm}}$
- 3) How many times the digit 5 does occur between 10 and 100?
- 4) The HCF of co prime numbers is
- 5) The successor of -3 is
- 6) The number of integers lying -4 and 4 is
- 7) Five pizzas are to be equally shared among 11 children. What is each child's share?
- 8) The LCM of 3,6,12 is
- 9) The distance around a circle is called its
- 10) The longest chord of a circle is 2.8 cm. The length of its radius is                     .

### **II. Two mark questions: (working should be shown)**

1. Estimate  $7888 \times 965$
2. Write in Roman Numerals : (a) 89 (b) 26
3. Find the product of  $3 \times 4$  using the number line.
4. Simplify:  $(25 \times 4) \times \{81 \div (4 + 5)\}$
5. Arrange the following integers in ascending order
  - (a) - 9, 16, 0, - 16, 24, -1
  - (b) 248 , - 284, -248, 482, -482
6. Evaluate  $|56 \div 7| - |-5|$
7. Subtract 9 from - 17. Write its absolute value.
8. In the quadrilateral ABCD
  - (i) Name all the pairs of adjacent sides.
  - (ii) Name all the pairs of opposite angles.
9. Find the sum of 665, 545 and 455 by using associative property.
10. Find the product of 250, 4, 5 and 400 by using suitable arrangement.

### **III. Three mark questions: (working should be shown)**

1. Find the value of  $23 \times 152 + 23 \times 21 - 23 \times 55 - 23 \times 18$  using properties of multiplication.
2. The number of students in each class of a school is 25. The fees paid by each student are Rs 928 per month. If there are 20 classes in a school. What is the total fee collection in a month? Also write the property used.
3. The sum of two integers is - 223. If one of the integers is 172. find the other.

4. Draw a circle of radius 3.8 cm and mark
  - (a) Its center as O
  - (b) A diameter PQ
  - (c) Shade a minor segment
  - (d) A quadrant XYZ
5.
  - (a) find the value of  $6 + (-16) + (-7)$
  - (b) write any pair of integers whose sum is zero.
6. Show that the product of 27 and 90 is equal to the product of their HCF and LCM.

**IV. Four mark questions:( working must be shown)**

1. On a particular day, the temperature at Delhi at 11 a.m was 12 degree Celsius but by midnight it fell down to 5 degree Celsius. The temperature of Mumbai at 11 a.m the same day was 16 degree Celsius but fell down to 9 degree Celsius by midnight. Which fall is greater?
2. Subtract the sum of  $-345$  and  $-67$  from the difference of  $423$  and  $-117$ ?
3. Reena had 20 pencils. Vanita had 50 pencils and Maria had 80 pencils. After 4 months, Reena used up 10 pencils. Vanita used up 25 pencils and Maria used up 40 pencils. What fraction did each use up? Check if each has used up an equal fraction of their pencils?
4. Check the divisibility of 8039450 by a) 9 b) 8 c) 11 d) 25 e) 15