

## **Class 6 Mathematics – Mid-Term Practice Paper**

1

Chapters: 1, 2 & 3 (RS Aggarwal)

Maximum Marks: 50

Time: 2 Hours

### Section A (1 mark each $\times$ 5 = 5 marks)

- 1. Write the number name of **7003025** according to the Indian system of numeration.
- 2. Write the successor of 999999.
- Write the predecessor of 4000000.
- 4. Find the smallest 6-digit number.
- 5. State the identity:  $\mathbf{a} + \mathbf{0} = ?$

### Section B (2 marks each $\times$ 5 = 10 marks)

- 6. Write the greatest and smallest 5-digit numbers using the digits 4, 0, 7, 3, 2 (repetition not allowed).
- 7. Multiply: **5432 × 1000**.
- 8. Write the Roman numeral for 89.
- 9. Find the HCF of 36 and 48 using the **prime factorization method**.
- 10. Express **420** as the product of prime factors.

### Section C (3 marks each $\times$ 5 = 15 marks)

- 11. The population of a town is 4,25,836. If 12,457 people migrated, what is the new population?
- 12. Find the value:  $(3725 \div 25) + (567 \times 11)$ .

- 13. Write the first five multiples of 18 and 24. Find their **LCM**.
- 14. Find the HCF and LCM of 18, 24, and 36. Verify that **HCF × LCM = Product of numbers** (take any two numbers).
- 15. Write the greatest 7-digit number and the smallest 7-digit number. Find their difference.

### Section D (5 marks each $\times$ 4 = 20 marks)

- 16. The cost of 1 bicycle is ₹2,450. Find the cost of 35 such bicycles.
- 17. A factory produces 3,675 toys in one day. How many toys will it produce in the month of January?
- 18. Three bells ring at intervals of 12 min, 15 min, and 20 min. If they ring together at 6:00 a.m., when will they ring together again?
- 19. Find the HCF of 90, 135, and 225 by prime factorization method.





# **Answer Sheet / Solutions**

- 1. Seventy lakh three thousand twenty-five.
- 2. 10,00,000
- 3. 39,99,999
- 4. 1,00,000
- 5. a

#### **Section B**

- 6. Greatest: 74,320, Smallest: 20,347
- 7. 54,32,000
- 8. LXXXIX

9. 
$$36 = 2 \times 2 \times 3 \times 3$$
;  $48 = 2 \times 2 \times 2 \times 2 \times 3$   
 $\rightarrow HCF = 2 \times 2 \times 3 = 12$ 

$$10.420 = 2 \times 2 \times 3 \times 5 \times 7$$

### **Section C**

11. 
$$4,25,836 - 12,457 = 4,13,379$$

12. 
$$(3725 \div 25) = 149$$
;  $(567 \times 11) = 6237$   
 $\rightarrow$  Total = 149 + 6237 = **6386**

### **Section D**

16. 
$$2450 \times 35 = 85,750$$

17. January = 31 days 
$$\rightarrow$$
 3675 × 31 = **1,13,925 toys**

19. 
$$90 = 2 \times 3 \times 3 \times 5$$
  
135 =  $3 \times 3 \times 3 \times 5$ 



### **Class 6 Mathematics – Practice Paper 2**

Chapters: 1, 2 & 3 (Knowing Our Numbers, Whole Numbers, Playing with Numbers)

**Maximum Marks: 50** 

Time: 2 Hours

### Section A (1 mark each $\times$ 5 = 5 marks)

- 1. Write the Roman numeral for **399**.
- 2. Write the largest 7-digit number using the digits **4**, **7**, **0**, **9**, **6**, **2**, **1** (without repetition).
- 3. Find the predecessor of **10,00,000**.
- 4. Write the next three multiples of **125** after 1000.
- 5. Evaluate:  $7 \times (1000 1)$ .

### Section B (2 marks each $\times$ 5 = 10 marks)

- 6. Write the difference between the greatest 8-digit number and the smallest 7-digit number.
- 7. A bus has a seating capacity of 52. How many passengers can 275 buses carry?
- 8. Express **980** as the product of prime factors.
- 9. Find the HCF of 84 and 126 using the prime factorization method.
- 10. Find the LCM of 36 and 48.

### Section C (3 marks each $\times$ 5 = 15 marks)

11. The product of two numbers is 43,200. If one number is 180, find the other.

- 12. Write all prime factors of 216. Using them, find whether 216 is divisible by 9.
- 13. Find the smallest number which when divided by 15, 18, and 27 leaves a remainder 3 in each case.
- 14. Verify the property: (23 + 37) + 45 = 23 + (37 + 45).
- 15. Find the HCF and LCM of 30, 45, and 60.

### Section D (5 marks each $\times$ 4 = 20 marks)

- 16. A factory produces 24,650 pens in a day. How many pens will it produce in the months of:
- (a) February (non-leap year)
- (b) March
- 17. The traffic lights at three crossings change after 30 sec, 45 sec, and 75 sec. If they change together at 9:00 a.m., at what time will they next change together?
- 18. The HCF of two numbers is 18 and their LCM is 1296. If one number is 144, find the other.
- 19. The population of a city is 32,47,586. If 4,68,729 children are below 6 years of age, and 2,35,410 people are above 60 years, find the population of people aged 6–60 years.





### **Answer Sheet / Solutions**

#### Section A

- 1. 399 = CCCXCIX
- 2. Greatest = 9764210
- 3. 999,999
- 4. 1125, 1250, 1375

5. 7000 - 7 = 6993

### **Section B**

- 6. Greatest 8-digit = 99,999,999; Smallest 7-digit = 10,00,000 Difference = 98,999,999
- 7.  $52 \times 275 = 14,300$  passengers
- 8.  $980 = 2 \times 2 \times 5 \times 7 \times 7$
- 9. 84 = 2 × 2 × 3 × 7 126 = 2 × 3 × 3 × 7 HCF = 2 × 3 × 7 = **42**
- 10.  $36 = 2^2 \times 3^2$   $48 = 2^4 \times 3$ LCM =  $2^4 \times 3^2 = 144$

### **Section C**

- 11. Other number =  $43200 \div 180 = 240$
- 12.  $216 = 2^3 \times 3^3$ Since  $3^2$  divides it, 216 is divisible by 9
- 13. LCM of 15, 18, 27 = 270 Smallest number = 270 + 3 = **273**
- 14. (23 + 37) + 45 = 60 + 45 = 105 23 + (37 + 45) = 23 + 82 = 105Verified
- 15.  $30 = 2 \times 3 \times 5$   $45 = 3^2 \times 5$   $60 = 2^2 \times 3 \times 5$   $HCF = 3 \times 5 = 15$  $LCM = 2^2 \times 3^2 \times 5 = 180$

- (a) February (28 days):  $24,650 \times 28 = 6,90,200 \text{ pens}$
- (b) March (31 days):  $24,650 \times 31 = 7,64,150$  pens
  - 17. LCM of 30, 45, 75 = 450 sec = 7 min 30 sec Next change together = **9:07:30 a.m.**
  - 18. If HCF × LCM = Product of numbers 18 × 1296 = 144 × ? 23,328 = 144 × ? ? = 162
    - $\rightarrow$  Other number = **162**
  - 19. Population aged 6-60 = 32,47,586 (4,68,729 + 2,35,410)= 32,47,586 - 7,04,139 = 25,43,447