

## Quantitative Aptitude Practice questions on Number Systems

### - Factors:

1. The sum of the factors of a number is 124. What is the number?

- A. Number lies between 40 and 50
- B. Number lies between 50 and 60
- C. Number lies between 60 and 80
- D. More than one such number exists

2. How many factors of 1080 are perfect squares?

- A. 4
- B. 6
- C. 8
- D. 5

3. How many factors of  $2^5 * 3^6 * 5^2$  are perfect squares?

- A. 18
- B. 24
- C. 36
- D. 8

4. How many factors of  $2^4 * 5^3 * 7^4$  are odd numbers?

- A. 100
- B. 99
- C. 20
- D. 24

5. How many factors of the number  $2^8 * 3^6 * 5^4 * 10^5$  are multiples of 120?

- A. 540

B. 660

C. 594

D. 792

**6. Number  $N = 2^6 * 5^5 * 7^6 * 10^7$ ; how many factors of  $N$  are even numbers?**

A. 1183

B. 1200

C. 1050

D. 840

**7. Numbers A, B, C and D have 16, 28, 30 and 27 factors. Which of these could be a perfect cube?**

A. A and B

B. B and C

C. A, B and C

D. B and D

**8. If a three digit number 'abc' has 3 factors, how many factors does the 6-digit number 'abcabc' have?**

A. 16 factors

B. 24 factors

C. 16 or 24 factors

D. 20 factors

**9. How many numbers are there less than 100 that cannot be written as a multiple of a perfect square greater than 1?**

A. 61

B. 56

C. 52

D. 65

**10. Find the smallest number that has exactly 18 factors.**

- A. 180
- B. 216
- C. 240
- D. None of these

**11. A number  $N^2$  has 15 factors. How many factors can N have?**

- A. 5 or 7 factors
- B. 6 or 8 factors
- C. 4 or 6 factors
- D. 9 or 8 factors

**12. If a three digit number 'abc' has 2 factors (where a, b, c are digits), how many factors does the 6-digit number 'abcabc' have?**

- A. 16
- B. 24
- C. 18
- D. 30

**Answer Key –**

<b>Q.No.</b>	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
<b>Ans.</b>	(D)	(A)	(B)	(C)	(C)	(A)	(A)	(C)	(A)	(A)	(B)	(A)