

(1)-: NUMBER SYSTEM :- <1>

1. In a two digit positive number, the digit at the unit place is equal to the square of the digit in ten's place and the difference between the number and the number obtained by interchanging the digits is 54. What is the 40% of the Original number?

- (a) 15.6 (b) 37.2 (c) 39.4 (d) 24.8

2. If the positions of the digits of a twodigit number are interchanged, the number obtained is smaller than the Original number by 27. If the digits of the number are in the ratio of 1:2, What is the Original number?

- (a) 16 (b) 32 (c) 63 (d) 48

3. A certain number of two digits is three times the sum of its digits. If 45 is added to it, the digits are reversed. The number is :-

- (a) 16 (b) 72 (c) 63 (d) 27

4. The number obtained by interchanging the two digits of a twodigit number is less than the Original number by 27. If the difference between the two digits of the number is 3; then What is the Original number?

- (a) 64 (b) 72 (c) 65 (d) None of these.

(Q) :- NUMBER SYSTEM :- <2>

5. Sum of three consecutive odd numbers and three consecutive even numbers together is 231. Difference between the smallest odd number and the smallest even number is 11. What is the sum of the largest even number and largest odd number?

- (a) 71 (b) 91 (c) 101 (d) 81

6. A number when divided by 837 leaves a remainder of 79. What will be the remainder when the same number is divided by 31?

- (a) 11 (b) 13 (c) 15 (d) 17

7. The numerator of a rational number is 4 less than the denominator. If the numerator is increased by 15 and denominator is decreased by 4, we get 6. Find the rational number?

- (a) $\frac{1}{5}$ (b) $\frac{2}{7}$ (c) $\frac{3}{7}$ (d) $\frac{5}{9}$

8. When a number is added to 20% of the second number, we get 150% of the second number. Find the ratio between the first and second number?

- (a) 13:9 (b) 12:10 (c) 13:10 (d) 17:10

9. Two different numbers when divided by same divisor leaves remainder 7 and 9 respectively. When their sum is divided by the same divisor remainder was 4. Find the divisor?

- (a) 11 (b) 12 (c) 13 (d) 14

(0) :- NUMBER SYSTEM :-

(3)

10. A number gets reduced to its two-third when 24 is subtracted from it. Find one-eighth of the number?
(a) 7 (b) 8 (c) 9 (d) 10

11. Three numbers are in the ratio 4:3:5. If the difference between thrice the third number and the sum of first and second number is 64. Find the difference between the first and third number?
(a) 4 (b) 8 (c) 12 (d) 16

12. How many numbers are there up to 1000 which are divisible by 4, 6 and 8 together?
(a) 39 (b) 40 (c) 41 (d) 42

13. Which is the number in the unit place of the number $(129)^{58}$?
(a) 1 (b) 2 (c) 4 (d) 9

14. A number when divided by 5 leaves a remainder 4. What is the remainder when the square of the same number is divided by 5?
(a) 1 (b) 2 (c) 4 (d) 3

15. When a number is divided by 527 gives the remainder as 21. When the same number is divided by 17; the remainder will be?
(a) 2 (b) 3 (c) 4 (d) 7

(Q) : NUMBER SYSTEM :- <1>

16. If the number $10*47*$ is divisible by both 5 and 11; then the missing digits are respectively.
(a) 1 and 5 (b) 6 and 0 (c) 5 and 0 (d) 2 and 5
17. When a number is multiplied by 13 and 13 is added to the product, the resultant is divisible by 5. Find the smallest number possible?
(a) 85 (b) 130 (c) 65 (d) 90
18. Find the least number which must be subtracted from 103876 to make the obtained number divisible by 16.
(a) 5 (b) 4 (c) 3 (d) 7
19. Kavya attends 40 questions and get 96 marks. If 3 marks are given for each correct answer and 1 mark is deducted for each wrong answer, find the number of question she attended correct?
(a) 15 (b) 34 (c) 32 (d) 36
20. Find the value of $1^2 + 2^2 + 3^2 + \dots + 24^2$.
(a) 3800 (b) 4900 (c) 5100 (d) 5430
21. When all the students in a school are made to stand in row of 68; 40 such rows are formed. If the students are made to stand in the row of 20; how many such rows can be formed?
(a) 85 (b) 136 (c) 129 (d) 97

(0) :- NUMBER SYSTEM :- <5>

22. A banana costs ₹ 1.25 and Orange costs ₹ 2.75.
What will be the total cost of 10 bananas and 2 dozens
Orange?

- (a) ₹ 52.50 (b) ₹ 61.75 (c) ₹ 73.25 (d) ₹ 79.50

23. If $x^p \cdot x^q \cdot x^r = 1$; then find the value of $p^3 + q^3 + r^3$

- (a) 0 (b) 1 (c) pqr (d) $3pqr$

24. If the divisor is five times the quotient and six
times the remainder; if the remainder is 5; then
the dividend is :-

- (a) 225 (b) 300 (c) 185 (d) 412

25. The product of 2 consecutive even number is
1224, then one of the number is

- (a) 26 (b) 36 (c) 28 (d) 42