NUMBER SYSTEM

1. What will be at the unit place of:-

$(2467)^{153} \times (34)^{72}$?

(1) 7 (2) 1

(3) 9 (4) 3

(5) None of these

2. What will be the total number of price factors in $4^{11} \times 7^5 \times 11^3$?

(1) 25 (2) 19

(3) 20 (4) 30

(5) None of these

3. What is the total number of three digit numbers divisible by 7?

(1) 142 (2) 145

(3) 147 (4) 151

(5) None of these

4. If 7765 is divided by a number, it given 45 as quotient and 25 as remainder. What is the number?

(1) 172 (2) 175

(3) 180 (4) 195

(5) None of these

5. If a number is divided by 119, it gives remainder 19. If the same number is divided by 17, what will be the remainder?

(1) 2 (2) 1

(3) 0 (4) 3

(5) None of these

6. What will be the remainder if 19^{35} is divided by 18?

(1) 0 (2) 1

(3) 2 (4) 3

(5) None of these

7. Which number will come at the unit place of $7^{35} \times 3^{71} \times 11^{55}$

(1) 1 (2) 2

(3) 3 (4) 4

(5) None of these

8. If 5432 * 7, is absolutely divisible by 9, then which among the which among the followed number is the *?

(1) 6 (2) 5

(3) 4 (4) 3

(5) None of these

9. Which among the following number can divide $4^{61} + 4^{62} + 4^{63} + 4^{64}$?

(1) 3 (2) 10

(3) 17 (4) 13

(5) None of these

10. If 50% of any number is 8 more than one third of the number, then the number is

(1) 48 (2) 50

(3) 94 (4) 42

(5) None of these

11. Two-thirds of three-fourth of one fifth of a number is 15. What is 30% of that number?

(1) 45 (2) 60

(3) 75 (4) 30

(5) None of these

12. When 30% of one number is subtracted from another number, the second number reduces to its fourth-fifth. What is the ratio of the first to the second number?

(1) 4 : 7

(2) 3 : 2

(3) 2 : 5

(4) Cannot be determined

(5) None of these

13. If the digits of a two-digit number are interchanged, the number formed is greater than original number by 45. If the different

between the digits is 5, what is the original number?

(1) 16

(2) 27

(3) 38

(4) Cannot be determined

(5) None of these

14. If the numerator of a fraction is increased by 240% and the denominator of the fraction is decreased by 50%, the resultant fraction is 2. What is the original fraction?

(1) $\frac{1}{4}$ (2) $\frac{2}{3}$

(3) $\frac{5}{12}$ (4) $\frac{4}{11}$

(5) None of these

15. The difference between a two-digit number and the number obtained by interchanging the two digit of two number is 9. What is difference between the two digits of the number?

(1) 3

(2) 2

(3) 1

(4) Cannot be determined

(5) None of these

16. The product of two consecutive even numbers is 3248. What is the larger number?

(1) 58 (2) 62

(3) 56 (4) 60

(5) None of these

17. The sum of five consecutive odd number is 575. What is the sum of the next set of the consecutive odd number?

(1) 615

(2) 635

(3) 595

(4) Cannot be determined

(5) None of these

18. 75% a number is equal to four fifths of another number. What is the ratio between the first and the second number?

(1) 5 : 3 (2) 15 : 16

(3) 3 : 5 (4) 16 : 15

(5) None of these

19. If the numerator of a fraction is increased by 25% and the denominator is doubled, the fraction thus obtained is $\frac{5}{9}$. What is the original fraction?

(1) $\frac{2}{3}$

(2) $\frac{4}{9}$

(3) $\frac{8}{9}$

(4) Cannot be determined

(5) None of these

20. If the position of the digits of a two-digit numbers 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?

(1) 36 (2) 63

(3) 48 (4) 54

(5) None of these

21. Twice the square of a number is six times the other number what is the ratio of the first number to the second?

(1) 1 : 4

(2) 2 : 5

(3) 1 : 3

(4) Cannot be determined

(5) None of these

22. Three numbers are in the ratio 2 : 3 : 4. The sum of the largest and the smallest equals the sum of the third and 54. What is the largest number?

(1) 54 (2) 74

(3) 82 (4) 70

(5) None of these

23. Out of three numbers the sum of the first and the second numbers is 73 and the sum of

second and the third number is 77. The sum of the third and thrice the first number is 104. What is the third number?

(1) 25 (2) 39

(3) 48 (4) 54

(5) None of these

24. The difference between a two-digit number and the number obtained by interchanging the two digits of the numbers is 36. What is the difference between the two digit of the number?

(1) 6

(2) 4

(3) 3

(4) cannot be determined

(5) None of these

25. Two numbers are less than the third number by 50% and 54% respectively. By how much percent is the second number less than the first number?

(1) 13 (2) 10

(3) 12 (4) 11

(5) None of these

26. One-fourth of sixty percent of a number is equal to two-fifths of twenty percent of another number. What is the ratio of the first number to the second?

(1) 4 : 7

(2) 8 : 13

(3) 5 : 9

(4) cannot be determined

(5) None of these

27. The product of two consecutive odd numbers in 4623. Which is the greater of the two number?

(1) 66 (2) 69

(3) 68 (4) 67

(5) None of these

28. The number obtained by interchanging the digits of a two-digit number is less than the original number by 63. If the sum of the digits of the number is 11, what is the original number?

(1) 29

(2) 92

(3) 74

(4) cannot be determined

(5) None of these

29. What is the greater of the two numbers whose product is 640, if the sum of the two numbers exceeds their difference by 32?

(1) 45 (2) 50

(3) 55 (4) 40

(5) None of these

30. The product of two successive numbers is 4032. Which is the greater of the two numbers?

(1) 63 (2) 64

(3) 65 (4) 66

(5) None of these

31. The number obtained by interchanging the two digits of a two-digit number is less than the original number by 18. The sum of the two digits of the number is 16. What is the original number?

(1) 97 (2) 87

(3) 79 (4) 78

(5) None of these

32. A number consists of four digits having 8 in the unit's place. If the digit in the extreme left is shifted to the immediate right to the unit place, keeping all other number as they are, the new number formed exceeds the original number by 1305. The original number is.

(1) 2671 (2) 3478

(3) 4651 (4) 3455

(5) None of these

33. The number of times 99 is subtracted from 1111 so that the remainder is less than 99 is

(1) 98 (2) 59

(3) 60 (4) 101

(5) None of these

34. When a number is divided by 13, the remainder is 11. When the same number is divided by 17, the remainder is 9, what is the number?

(1) 143 (2) 245
(3) 128 (4) 113
(5) None of these

35. If the number 354A25B is divisible by 3 and 5, then the alphabets in the unit place and the thousandth place respectively are.
(1) 3, 7 (2) 9, 8
(3) 1, 3 (4) 5, 0
(5) None of these

36. A number was divided successively in order by 4, 5 and 6. The remainders were 2, 3, and 4 respectively. The smallest such number is
(1) 133 (2) 175
(3) 302 (4) 214
(5) None of these

37. The least number which must be subtracted from 6709 to make it exactly divisible by 9 is
(1) 1 (2) 2
(3) 3 (4) 5
(5) None of these

38. The least number which must be added to 43557 to make it exactly divisible by 4 is
(1) 3 (2) 4
(3) 1 (4) 2
(5) None of these

39. How many of the following numbers are divisibly by 37?
4611, 1111, 1010, 2133, 968, 111, 2222
(1) 2133 (2) 111
(3) 1111 (4) 2222
(5) None of these

40. What is the maximum value of A + B if A is the smallest price number and B is the largest price number less than 100?
(1) 109 (2) 78
(3) 99 (4) 81
(5) None of these

41. The sum of the digits of a two-digit number is $\frac{1}{11}$ of the sum of the number and the number obtained by interchanging the position of the digits. What is the difference between the digits of that number?
(1) 111 (2) 11
(3) 33 (4) 1
(5) Cannot be determined

42. What is the H. C. F. of the numbers 1331, 1111, 121, 550?
(1) 111 (2) 11
(3) 33 (4) 1
(5) None of these

43. A 4-digit number is formed by repeating a 2-digit like 3737, 2121 ect. Any number of this form is exactly divisible by
(1) 101 (2) 124
(3) 16 (4) 8
(5) None of these

44. The greater number by which the product of three consecutive multiple of 3 is always divisible is?
(1) 151 (2) 146
(3) 162 (4) 128
(5) None of these

45. What least number must be subtracted from 427398 so that the remaining number is divisible by 15?
(1) 2 (2) 3
(3) 1 (4) 4
(5) None of these

46. Find the sum of prime numbers lying between 60 and 75?
(1) 250 (2) 142
(3) 110 (4) 180
(5) None of these

47. A number when divided by the sum of 555 and 445 given two times their difference as quotient and 30 as the remainder. The number is
(1) 183000 (2) 234200
(3) 11000 (4) 2110030
(5) None of these

48. What is the HCF of 1.08, 0.36 and 0.9?
(1) 0.18 (2) 2

(3) 1.5 (4) 0.3

(5) None of these

49. Two numbers, both greater than 29, have HCF 29 and LCM 4147. The sum of the number is?

(1) 212 (2) 696

(3) 524 (4) 580

(5) None of these

50. The HCF and LCM of two numbers are 11 and 385 respectively. If one number lies between 75 and 125, then that number is?

(1) 56 (2) 24

(3) 44 (4) 77

(5) None of these

51. The difference between the place value of 7 and 3 in the number 527435 is

(1) 5560 (2) 5562

(3) 1134 (4) 3768

(5) None of these

52. The least number which when divided by 5, 6, 7 and 8 leaves remainder 3, but when divided by 9 leaves no remainder is

(1) 1921 (2) 1700

(3) 1683 (4) 1600

(5) None of these

53. A, B and C start at the same time in the same direction to run around a circular stadium. A complete a round in 252 second, B in 308 seconds and C in 198 seconds, all starting at the same point. After what time will they meet again at the starting point?

(1) 35 min 10 sec

(2) 46 min 12 sec

(3) 40 min 11 sec

(4) 30 min 10 sec

(5) None of these

54. If the digit of a two-digit number is interchanged the newly formed number is more than the original number by 18 and sum of the digit is 8, than the original number is

(1) 35 (2) 24

(3) 27 (4) 30

(5) None of these

55. How many of the following numbers are divisible by 132?

264, 396, 462, 792, 968, 2178, 5184, 6336

(1) 3 (2) 5

(3) 6 (4) 4

(5) None of these

56. The sum of three consecutive numbers is given. What is the different between first and third number?

(1) 4 (2) 2

(3) 5 (4) 7

(5) None of these

57. A number gets reduced to its one third when 48 is subtracted from it. What is the two third of that number?

(1) 12 (2) 24

(3) 36 (4) 48

(5) None of these

58. The sum of three consecutive odd numbers is always divisible by

(1) 2 (2) 3

(3) 9 (4) 5

(5) None of these

59. A positive integer, which when added to 1000, gives a sum which is greater than when it is multiplied by 1000, the positive integer is

(1) 3 (2) 2

(3) 4 (4) 1

(5) None of these

60. The difference between two numbers is 1365. When the larger number is divided by the smaller one, the quotient is 6 and the remainder is 15. The smaller number is

(1) 156 (2) 204

(3) 112 (4) 120

(5) None of these

61. There are four prime number written in ascending order. The product of the first three is 385 and that of the last three is 1001. The last number is

(1) 21 (2) 13
(3) 11 (4) 12
(5) None of these

62. By how much is three-fifth of 350 greater than four-seventh of 210?

(1) 90 (2) 20
(3) 25 (4) 36
(5) None of these

63. The lowest of four consecutive even number is 7 less than the lowest of the four consecutive odd numbers. What is the difference between the highest even and odd numbers?

(1) 5 (2) 8
(3) 7 (4) 9
(5) None of these

64. If the digit in the unit's place of a two digit is halved and the digit in the ten's place is doubled, the number thus obtained is equal to the number obtained by interchanging the digits of the original number, then the original number is

(1) 21 (2) 47
(3) 56 (4) 35
(5) None of these

65. The difference between a 2-digit number and the number after interchanging the position of two digit is 36. What the difference between the two digits of the number?

(1) 2 (2) 4
(3) 5 (4) 6
(5) None of these

66. If we write all whole numbers from 200 to 400 then how may of these contain the digit 7 once and only once?

(1) 26 (2) 38
(3) 29 (4) 30
(5) None of these

67. A number when divided successively by 4 and 5 leaves remainder 1 and 4 respectively. When it is successively divided by 5 and 4, then the respective remainders will be?

(1) 2, 3 (2) 4, 3
(3) 3, 2 (4) 2, 1
(5) None of these

68. The number obtained by interchanging the digits of a two digit number is more than the original number by 45. If the digit in the unit's place of the original number is more than the digit in ten's place by 5, what is the original number?

(1) 61 (2) 42
(3) 37 (4) 33
(5) cannot be determined

69. The square of a position integer is more than its five times by 14. What is the positive integer?

(1) 5 (2) 7
(3) 6 (4) 3
(5) None of these

70. What should be subtracted from the number 123457 so that the new number is divisible by 8?

(1) 4 (2) 5
(3) 3 (4) 2
(5) None of these

71. What is the LCM and HCF of the number 1024, 24, 6 and 27?

(1) $2^{10} \times 3^3$, 1 (2) $2^{10} \times 3^3$, 3
(3) $2^{12} \times 3^3$, 5 (4) $2^{10} \times 3^4$, 1
(5) None of these

72. Out of the following numbers, which is divisible by 111?

(1) 3455 (2) 1204
(3) 1245 (4) 4773
(5) None of these

73. The value of K if K35624 is divisible by 11?

(1) 8 (2) 3
(3) 4 (4) 7
(5) None of these

74. Find the least number exactly divisible by 12, 30, 24 and 26?

(1) 312 (2) 240
(3) 110 (4) 213

(5) None of these

75. Find the least number which when divided by 2, 3, 4 and 5, eaves the same remainder?

(1) 121 (2) 240

(3) 110 (4) 231

(5) None of these

76. The number which when divided by 33 is perfectly divisible by and closer to 1000 is

(1) 316 (2) 672

(3) 756 (4) 819

(5) None of these

77. A number when divided by 5, leaves a remainder of 4. When the double of that number is divisible by 5, the remainder will be?

(1) 1 (2) 4

(3) 3 (4) 2

(5) None of these

78. A number when divided by 6, leaves a remainder of 2. When the triple of that number is divided by 3, the remainder will be?

(1) 2 (2) 0

(3) 1 (4) 3

(5) None of these

79. What should be subtracted from 43667788 so that it becomes divisible by 4?

(1) 5 (2) 2

(3) 11 (4) 3

(5) None of these

80. What is the least number which should be added to 3477623 so that it becomes divisible by 3?

(1) 3 (2) 2

(3) 1 (4) 4

(5) None of these

81. Find the least number which can be divided by 32, 36 and 40?

(1) 1232 (2) 1234

(3) 1145 (4) 1440

(5) None of these

ANSWERS

1.	5	**15.**	3	**29.**	4	**43.**	1	**57.**	4	**71.**	1
2.	4	**16.**	1	**30.**	2	**44.**	3	**58.**	2	**72.**	4
3.	5	**17.**	5	**31.**	1	**45.**	2	**59.**	4	**73.**	1
4.	1	**18.**	4	**32.**	2	**46.**	5	**60.**	5	**74.**	1
5.	1	**19.**	3	**33.**	5	**47.**	4	**61.**	2	**75.**	1
6.	2	**20.**	2	**34.**	3	**48.**	1	**62.**	1	**76.**	5
7.	1	**21.**	4	**35.**	4	**49.**	2	**63.**	3	**77.**	3
8.	1	**22.**	5	**36.**	4	**50.**	1	**64.**	5	**78.**	2
9.	3	**23.**	5	**37.**	5	**51.**	5	**65.**	2	**79.**	5
10.	1	**24.**	2	**38.**	3	**52.**	3	**66.**	2	**80.**	3
11.	1	**25.**	5	**39.**	2	**53.**	2	**67.**	4	**81.**	4
12.	5	**26.**	5	**40.**	3	**54.**	1	**68.**	5		
13.	4	**27.**	2	**41.**	5	**55.**	4	**69.**	2		
14.	3	**28.**	2	**42.**	2	**56.**	2	**70.**	5		