Number systems and LCM and HCF

1)What will be the smallest number divisible by 6, 8, 18, 24 and 36?

1) 36 2)72 3)48 4) 144 5) None of these

2)Which is the least number divisible by 10, 18 and 25?

1) 350 2)450 3)320 4) 500 5) None of these

3)Find the greatest number of 4 digits, which is exactly divisible by 8, 12, 18, 15 and 20.

1) 9840 2) 9720 3) 9280 4) 9630 5) None of these

4)Which is the greatest number of 4 digits, which is divisible by each one of the numbers 12, 18, 21 and 28?

1) 9848 2) 9864 3) 9828 4) 9636 5) None of these

5)Find the least number which when increased by 6 is exactly divided by 12, 21 & 35

1) 441 2) 144 3) 414 4) none

6)Find the smallest number which when divided by 6, 9, 12 & 15 leaves 5 as remainder in each case

1) 185 2) 158 3) 365 4) none

7)What is the smallest number which when divided by 16, 20, and 25 leaves remainder 7, 11, and 16 respectively?

1) 391 2) 404 3) 164 4) 146 5) None of these

8)Which is the smallest number which when divided by 20, 25, 35 and 40 leaves the remainder 14, 19, 29 and 34 respectively?

1) 1394 2) 1404 3) 1664 4) 1406 5) None of these

9)Find the smallest number which when divided by 32, 40, 56 leaves 12, 20, 36 as remainders respectively

a) 1140 b) 1120 c) 1410 d) none

10)What is the largest number that can exactly divide 52, 65 and 143?

1) 11 2) 13 3) 14 4) 12 5) None of these

11)What is the greatest number that will exactly divide 75, 90 and 165?

1) 11 2) 15 3) 14 4) 12 5) None of these

12)What is HCF of 720 and 324?
1) 32 2)50 3) 9 4) 36 5) None of these

13)What will be the greatest number that divides 68, 59 and 43 leaving the remainders 8,9 and 3 respectively?
1) 8 2) 10 3) 24 4) 35 5) None of these

14)Find the greatest number that will divide 65, 81 and 145 leaving the 1 remainder in each case.
1) 32 2)50 3) 9 4) 16 5) None of these

15)The LCM and HCF of two positive numbers are 300 and 30 respectively. If one of the numbers is divided by4,the quotient is 15,then what is the other number?

1) 360 2) 300 3) 150 4) 75 5) None of these

16)The HCF of two numbers is 11 and their LCM is 7700. If one of these numbers is 275, then what is the other number?

1) 279 2) 283 3) 308 4) 318 5) 320

17)The H.C.F and L.C.M of two numbers are 44 and 264 respectively. If the first number is divided by 2, the quotient is 44. What is the other number?
1) 123 2) 33 3) 66 4) 264 5) None of thes

18)The H.C.F of two numbers is 12 and their L.C.M is 360. If one of the numbers is 36. Find the other number?

a) 80 b) 90 c) 100 d) none 120

19)What is the least number of square tiles of uniform size required to pave the floor of a rectangular hall of length 20 m and breadth 16m?

1) 15 2) 20 3) 35 4) 8 5) None of these

20)The length and breadth of a room are 13 m and 7.5 m respectively; the floor of the room is to be paved with square tiles of uniform size. What will be the length of the largest possible size of the tile?

1) 1.0m 2) 0.5m 3) 1.5m 4) 5.0m 5) 6.0m

21)The L.C.M. of two numbers is 15 times its H.C.F. If the product of those number's is 14415. Find H.C.F

a) 30 b) 13 c) 31 d) none

22)In finding H.C.F. of two numbers by division method, the quotients are 2, 4, 6 respectively and the last divisor is 17. Find those numbers.

a) 425, 952 b) 452, 952 c) 425, 925 d) none

23) Four bells ring at intervals of 10 min, 12 min, 15 min, & 20 min respectively. If they ring together at 8 am, find after what interval of time do they ring together again?

- **9 am** (2) 10 am (3) 11 am (4) none these

24)Three alarms ring at intervals of 2,6,12 minutes respectively. If they all ring together at 1 PM when will they ring all together the next time.

a) 1 AM b) 1.12 PM

- 1**.12 AM** d) Next 1 PM

25)A man wrote all the natural numbers starting from 1 in a series. What will be the 50th digit of the number?

(a) 1 (b) 2 (c) 3 (d) 4

26)The value of 101 + 102 + 103 + …… + 200 is

(a) 15050 (b) 20200 (c) 10909

(d) 16500 (e) None of these

27)A monkey wanted to climb on the smooth vertical pole of height of 35 metre. In the first one minute he climbs up 5 metre in the next one minute he slips down by 2 metre. Further he repeated the same process till he has reached on the top of the pole. How many times it has to go upward to reach the apex of the pole?

(1) 10 (2) 11 (3) 12 (4) none these

28) What least number should be added to 16380 to make it a perfect square?
(1) 1 (2) 2 (3) 3 (4) none these(4)

29). How many numbers between 500 and 1000 are divisible by 13?
(1) 33 (2) 34 (3) 35 (4) none these(38)

30)A bought some chocolates from a shop, he gave to B one less than half of what he had initially. Then be and given 3 chocolates to C and then half of the chocolates which he had then given to D. finally he gave one chocolate to E and one chocolate with him. The number of chocolates he had bought.
(1) 8 (2) 12 (3) 14 (4) none these

31)A typist starts to type the serial numbers of candidates in a list, up to 500. Minimum how many times he has to press the keys of numerals only?
- 1389 (2) 1392 (3) 1344 (4) none these

32)There are two, 2-digit numbers ab & cd, ba is another 2-digit number prepared by reversing the digits of ab, if ab X cd = 493 and ba X cd = 2059, what is the value of sum of (ab + cd)?
(a) 43 (b) 45 (c) 47 d) 46 (e) 49

33)What is the number of zeros at the end of 126!?

(a) 26 (b) 12 (c) 13 (d) 31

34)The sum of the digits of a two-digit numbers is 10, while when the digits are reversed, the number decrease by 54.The changed number.

(a) 28 (b) 19 (c) 37 (d) 46

35)The sum of two numbers is 15 and their geometrical mean is 20% lower than their arithmetic mean. Find the numbers.

(a) 11, 4 (b) 12, 3 (c) 13, 2 (d) 10, 5

36)If A381 is divisible by 11, find the value of the smallest natural number A?

(a) 5 (b) 6 (c) 7 (d) 9

38)Find the number of divisors of 1420.

(a) 14 (b) 15 (c) 13 12

39)Which of the following is not a perfect square?

(a) 100858 (b) 325137 (c) 94572 (d) All the above

40)Which of the following can never be in the ending of a perfect square?

(a) 6 (b) 00 (c) 000 (d) 5

41)120 apples were present with total of 7 persons. Each person had atleast 13 apples. Which of the following cannot be the total number of apples with any 2 persons.

a) 47 b) 44 c)56 d) 33

42) 1000! ends with _____ number of consecutive zeros

a) 248 b) 249 c) 312 d) 124

43)The number obtained by interchanging the two digits of a two-digit number is more than the original number by 27. If the sum of the two digits is 13, what is the original number?

1) 63 2) 74 3) 85 4) 58 5) None of these

44)When the digits of a two-digit number are interchanged, the number obtained is less than the original number by 36. What is the original number if the difference of the two digits is 4?

1) 84 2)51 3)73 4) Cannot be determined 5) None of these

45)The product of two successive numbers is 4692. Which is the smaller of the two numbers?

1)69 2)62 3)68 4)67 5) None of these

46)The product of two successive numbers is 9506. Which is the smaller of the two numbers?

1)96 2)97 3)98 4)99 5) None of these

47)The product of two consecutive even numbers is 3248. Which is the larger number?

1)58 2)62 3)56 4)60 5) None of these

48)The sum of five consecutive even numbers is 200. What is the sum of the next set of the consecutive even numbers?

1)215 2)235 3) 240 4) 250 5) None of these

49)The sum of five consecutive odd numbers is 575. What is the sum of the next set of the consecutive odd numbers?

1)615 2)635 3) 595 4) Cannot be determined 5) None of these

50)On a school's annual day sweets are to be equally distributed amongst 112 children. But on that particular day, 32 children were absent.Thus the remaining children got 6extra sweets. How many sweets was each child originally supposed to get?

1)24 2)18 3)15 4) Cannot be determined 5) None of these

51)There are two numbers such that the sum of twice the first number and thrice the second number is 300 and the sum of thrice the first number and twice the second number is 265. What is the larger number?

1) 24 2)39 3)85 4)74 5) None of these

52) Find the unit digit of 122^{122} X 133^{133}.

(a) **2** (b) 4 (c) 6 (d) 8

53) Find the unit digit of the product of all the elements of the set which consists of all the prime numbers greater than 2 but less than 222.

(1) 3 (2) 4 (3) 5 (4) none these

54) The unit digit of the following expression is

$(1!)^1 + (2!)^2 + (3!)^3 + (4!)^4 + (5!)^5 + (6!)^6$

1)5 (2) 6 **(3) 7** (4) none these

55)Find the unit digit of $222^{888} + 888^{222}$.

1) 0 2) 1 3**) 2** 4) none these

56). Find the remainder of 15 X 17 X 19 when divided by 7.

(a) 5 (b) 3 **(c) 1** d)0

57). A Certain number when divided by 95 leaves a remainder 30. What is the remainder if, the same number be divided by 19?

(1) 8 (2) 9 (3) 10 (4) **none these (11)**

58)Find the smallest number which gives a remainder 5,when divided by any of the numbers 8,12and 15.

1) 120 2) 240 3) 125 4) 65 5) 101

59) Numbers from 1 to 100 are written side by side. What is the 74^{th} digit?

a) 3 b) **4 c)**1 d) 5

1) 120 2) 240 3) 125 4) 65 5) 101