1) The least number, which is a perfect square and is divisible by each of the numbers 16, 20 and 24, is
a) 14400   b) 6400
c) 3600   d) 1600

2) The smallest number, which, when divided by 12 or 10 or 8, leaves remainder 6 in each case, is
a) 66   b) 126   c) 186   d) 246

3) The least number which when divided by 5, 6, 7 and 8 leaves a remainder 3, but when divided by 9 leaves no remainder is
a) 3363   b) 2523   c) 1683   d) 1677

4) The smallest number, which when increased by 5 is divisible by each of 24, 32, 36 and 564, is
a) 427   b) 4320   c) 859   d) 869

5) The traffic lights at three different road crossings change after 24 seconds, 36 seconds and 54 seconds respectively. If they all change simultaneously at 10 : 15 : 00 AM, then at what time will they again change simultaneously?
a) 10 : 22 : 12 AM   b) 10 : 17 : 02 AM
c) 10 : 18 : 36 AM   d) 10 : 16 : 54 AM

6) The least number, which when divided by 4, 5 and 6 leaves remainder 1, 2 and 3 respectively, is
a) 63   b) 61   c) 59   d) 57

7) Let the least number of six digits which when divided by 4, 6, 10, 15 leaves in each case same remainder 2 be N. The sum of digits in N is :
a) 6   b) 4   c) 5   d) 3

8) The least number which when divided by 4, 6, 8 and 9 leave zero remainder in each case and when divided by 13 leaves a remainder of 7 is :
a) 85   b) 36   c) 72   d) 144

9) The smallest square number divisible by 10, 16 and 24 is
a) 3600   b) 2500   c) 1600   d) 900

10) When a number is divided by 15, 20 or 35, each time the remainder is 8. Then the smallest number is
a) 338   b) 328   c) 427   d) 428

11) If the students of a class can be grouped exactly into 6 or 8 or 10, then the minimum number of students in the class must be
a) 240   b) 180   c) 120   d) 60

12) The greatest number of four digits which when divided by 3, 5, 7, 9 leave remainders 1, 3, 5, 7 respectively is :
a) 9765   b) 9766   c) 9764   d) 9763

13) Find the greatest number of five digits which when divided by 3, 5, 8, 12 have 2 as remainder :
a) 99962   b) 99960
c) 99958   d) 99999

14) Three electronic devices make a beep after every 48 seconds, 72 seconds and 108 seconds respectively. They beeped together at 10 a.m. The time when they will next make a beep together at the earliest is
a) 10 : 07 : 48 hours   b) 10 : 07 : 36 hours
c) 10 : 07 : 24 hours   d) 10 : 07 : 12 hours

15) Which is the least number which when doubled will be exactly divisible by 12, 18, 21 and 30 ?
a) 196   b) 630   c) 1260   d) 2520

16) The least multiple of 13, which on dividing by 4, 5, 6, 7 and 8 leaves remainder 2 in each case is:
a) 840   b) 2522   c) 842   d) 2520

17) The largest 4-digit number exactly divisible by each of 12, 15, 18 and 27 is
a) 9960   b) 9930   c) 9720   d) 9690

18) A, B, C start running at the same time and at the same point in the same direction in a circular stadium. A completes a round in 252 seconds, B in 308 seconds and C in 198 seconds. After what time will they meet again at the starting point ?
a) 46 minutes 12 seconds
b) 45 minutes
c) 42 minutes 36 seconds
d) 26 minutes 18 seconds

19) Three bells ring at intervals of 36 seconds, 40 seconds and 48 seconds respectively. They start ringing together at a particular time. They will ring together after every
a) 24 minutes   b) 18 minutes
c) 12 minutes   d) 6 minutes

20) The greatest number of four digits which when divided by 12, 16 and 24 leave remainders 2, 6 and 14 respectively is
a) 9998   b) 9807   c) 9970   d) 9974

21) The least number, which when divided by 12, 15, 20 or 54 leaves a remainder of 4 in each case, is :
a) 544   b) 540   c) 454   d) 450

22) Four runners started running simultaneously from a point on a circular track. They took 200 seconds, 300 seconds, 360 seconds and 450 seconds to complete one round. After how much time do they meet at the starting point for the first time ?
a) 4800 seconds   b) 2400 seconds
c) 3600 seconds   d) 1800 seconds

23) Find the largest number of four digits such that on dividing by 15, 18, 21 and 24 the remainders are 11, 14, 17 and 20 respectively.
a) 7664   b) 5675   c) 7556   d) 6557

24) What is the smallest number which leaves remainder 3 when divided by any of the numbers 5, 6 or 8 but leaves no remainder when it is divided by 9 ?
a) 243   b) 723   c) 603   d) 123

25) The largest number of five digits which, when divided by 16, 24, 30, or 36 leaves the same remainder 10 in each case, is :
a) 99350   b) 99269   c) 99370   d) 99279

26) The greatest number, which when subtracted from 5834, gives a number exactly divisible by each of 20, 28 32 and 35, is
a) 5600   b) 5200   c) 4714   d) 1120

27) Five bells begin to toll together and toll respectively at intervals of 6, 7, 8, 9 and 12 seconds. After how many seconds will they toll together again ?
a) 318 Sec.   b) 504 Sec.
c) 612 Sec.   d) 72 Sec.

28) The LCM of two prime numbers x and y, ($x > y$) is 161. The value of ($3y - x$) :
a) 2   b) 1   c) −1   d) −2

29) Four bells ring at intervals of 4, 6, 8 and 14 seconds They start ringing simultaneously at 12.00 O'clock. At what time will they again ring simultaneously ?
a) 12 hrs. 3 min. 44 sec.
b) 12 hrs. 3 min. 20 sec.
c) 12 hrs. 3 min.
d) 12 hrs. 2 min. 48 sec.

30) Find the least number which when divided separately by 15, 20, 36 and 48 leaves 3 as remainder in each case.
a) 723   b) 483   c) 243   d) 183

31) What is the least number which when divided by the numbers 3, 5, 6, 8, 10 and 12 leaves in each case a remainder 2 but when divided by 13 leaves no remainder ?
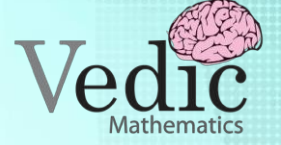
a) 1586　　b) 1562　　c) 962　　d) 312

32) The smallest perfect square divisible by each of 6, 12 and 18 is
a) 36　　b) 108　　c) 144　　d) 196

33) The least perfect square, which is divisible by each of 21, 36 and 66 is
a) 231444　　b) 213444
c) 214434　　d) 214344

34) The greatest 4-digit number exactly divisible by 10, 15, 20 is
a) 9995　　b) 9980　　c) 9960　　d) 9990

35) The number nearest to 43582 divisible by each of 25, 50 and 75 is :
a) 43550　　b) 43600　　c) 43650　　d) 43500

36) The LCM of four consecutive numbers is 60. The sum of the first two numbers is equal to the fourth number. What is the sum of four numbers?
a) 24　　b) 21　　c) 14　　d) 17

37) The least number which when divided by 16, 18, 20 and 25 leaves 4 as remainder in each case but when divided by 7 leaves no remainder is
a) 18004　　b) 18002　　c) 18000　　d) 17004

38) Three bells ring simultaneously at 11a.m. They ring at regular intervals of 20 minutes, 30 minutes, 40 minutes respectively. The time when all the three ring together next is
a) 1.30 p.m.　　b) 1.15 p.m.
c) 1 p.m.　　d) 2 p.m.

39) The number nearest to 10000, which is exactly divisible by each of 3, 4, 5, 6, 7 and 8, is :
a) 10000　　b) 9996　　c) 10080　　d) 9240

40) A number which when divided by 10 leaves a remainder of 9, when divided by 9 leaves a remainder

of 8, and when divided by 8 leaves a remainder of 7, is :
a) 1359　　b) 359　　c) 539　　d) 1539

41) The least multiple of 7, which leaves the remainder 4, when divided by any of 6, 9, 15 and 18, is
a) 364　　b) 184　　c) 94　　d) 76

42) 4 bells ring at intervals of 30 minutes, 1 hour, $1\frac{1}{2}$ hour and 1 hour 45 minutes respectively. All the bells ring simultaneously at 12 noon. They will again ring simultaneously at :
a) 9 a.m.　　b) 6 a.m.
c) 3 a.m.　　d) 12 mid night

43) Four bells ring at the intervals of 5, 6, 8 and 9 seconds. All the bells ring simultaneously at some time. They will again ring simultaneously after
a) 24 minutes　　b) 18 minutes
c) 12 minutes　　d) 6 minutes

44) L.C.M. of $\frac{2}{3}, \frac{4}{9}, \frac{5}{6}$ is
a) $\frac{20}{27}$　　b) $\frac{10}{3}$　　c) $\frac{20}{3}$　　d) $\frac{8}{27}$

45) The smallest number, which when divided by 5, 10, 12 and 15, leaves remainder 2 in each case; but when divided by 7 leaves no remainder, is
a) 91　　b) 175 `　　c) 182　　d) 189

46) The least number, which when divided by 18, 27 and 36 separately leaves remainders 5,14, and 23 respectively, is
a) 77　　b) 149　　c) 113　　d) 95

47) Three men step off together from the same spot. Their steps measure 63 cm, 70 cm and 77 cm respectively. The minimum distance each should cover so that all can cover the distance in complete steps is
a) 6950 cm　　b) 6930 cm
c) 9360 cm　　d) 9630 cm

48) From a point on a circular track 5 km long A, B and C started running in the same direction at the same time with speed of $2\frac{1}{2}$ km per hour, 3 km per hour and 2 km per hour respectively. Then on the starting point all three will meet again after
a) 15 hours   b) 10 hours
c) 6 hours   d) 30 hours

49) The smallest number, which when divided by 12 and 16 leaves remainder 5 and 9 respectively, is :
a) 29   b) 39   c) 41   d) 55

50) What least number must be subtracted from 1936 so that the resulting number when divided by 9, 10 and 15 will leave in each case the same remainder 7 ?
a) 30   b) 39   c) 36   d) 37

51) The least number which when divided by 4, 6, 8, 12 and 16 leaves a remainder of 2 in each case is :
a) 56   b) 50   c) 48   d) 46