**HCF LCM**

**MODEL 1:** BASICS

1. Find the highest common factor of 36 and 84.

**(a) 12** (b) 24 (c) 30 (d) 42

1. H.C.F. of 513, 1134 and 1215 is \_\_\_\_\_\_\_\_\_\_\_\_\_

(a)18 **(b)27** (c)33 (d)3

1. What is the L.C.M. of 25, 30, 35 and 40?

(a) 4000 (b) 4100 **(c) 4200** (d) 4300

1. Find the least number which is exactly divisible by 12, 15, and 20.  
   (a)40 (b)50 **(c)60** (d)80
2. Find the lowest common multiple of 24, 12 and 48.

**(a) 48** (b) 56 (c) 60 (d) 36

**Product of Two numbers**

1. The H.C.F. of two numbers is 11 and their L.C.M. is 7700. If one of the numbers is 275, then the other is:

(a) 279 (b) 283 **(c) 308** (d) 318

1. The ratio of two numbers is 3: 4 and their H.C.F. is 4. Their L.C.M. is:

(a) 12 (b) 16 (c).24 **(d) 48**

1. H.C.F. of two numbers is 13. If these two numbers are in the ratio of 15: 11, then find the numbers.  
   (a) 230, 140 (b) 215, 130 **(c) 195, 143** (d) 155, 115
2. If the product and H.C.F. of two numbers are 4107 and 37 respectively, then find the greater number.  
   **(a) 111** (b) 222 (c) 332 (d) 452
3. The HCF and LCM of any two numbers are 63 and 1260 respectively. If one of the two numbers is 315, find the other number.

**(a) 252** (b) 237 (c) 332 (d) 452

1. The sum of two numbers is 528 and their H.C.F is 33. The number of pairs of numbers satisfying the above condition is ?

**(a) 4** (b) 5 (c) 3 (d) 7

1. The H.C.F of two numbers, each having three digits, is 17 and their L.C.M is 714. Find sum of the numbers will be:

A. 289 B. 391 **C. 221** D. 731

**REMAINDER CONCEPT**

1. Find the greatest number that will exactly divide 24, 36 and 42.

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

1. Find the least number which leaves remainder 1 when divided by 2, 2 when divided by 3, 3 when divided by 4.

(a)12 (b)13 **(c)11** (d)15

1. Find the largest three digit number which leaves remainder 2 when divided by 14 or 35.

**A. 982** B. 980 C. 978 D. 934

1. Find the greatest number that will divide 43, 91 and 183 so as to leave the same remainder in each case.

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

1. Find the greatest number that will divide 148, 246 and 623 leaving remainders 4, 6 and 11 respectively?

a)20 **b)12** c)6 d)48

1. Find the least number which is exactly divisible by 12,8 and 10.

(a)80 (b)100 **(c)120** (d)240

1. What is the least amount that a person can have, such that when he distributes it into groups Rs.16 or Rs.18 or Rs.20 or Rs.25, he is always left with 4?

a)3600 b)2500 c)2504 **d)3604**

1. The least number which when divided by 4, 5 and 6 leaves remainder 1, 2 and 3 respectively is,

**a)57**  b)59 c)61 d)63

1. Find the least number which when divided by 4, 9 and 12, leave in each case remainder 3?

(a)36 **(b)39** (c)33 (d)42

1. Find the least number which when divided by 4, 6, 8, 12 & 16 leave in each case remainder 2?

(a)46 **(b)50** (c)48 (d)96

1. What is the greatest 4-digit number that leaves remainders 3, 4, 8, and 15 when divided by 10, 11, 15, and 22?

(a)330 **(b)9893** (c)9900 (d)323

**APPLICATION BASED**

1. 5 bells commence tolling together and toll at intervals 2, 4, 6, 8 and 10 seconds respectively. Find in 40 minutes, how many times do they toll together?  
   (a) 8 times (b) 19 times **(c) 21 times** (d) 30 times
2. The traffic lights at three different road crossings change after every 40 sec, 72 sec and 108 sec respectively. If they all change simultaneously at 5 : 20 : 00 hours, then find the time at which they will change simultaneously.

(a) 5 : 28 : 00 hrs (b) 5 : 30 : 00 hrs (c) 5 : 38 : 00 hrs (d) 5 : 40 : 00 hrs

1. John, Smith and Kate start at same time, same point and in same direction to run around a circular ground. John completes a round in 250 seconds, Smith in 300 seconds and Kate in 150 seconds. Find after what time will they meet again at the starting point?

(a) 30 min (b) 25 min (c) 20 min (d) 15 min

1. A merchant has two kinds of oil of 60 litres and 100 litres respectively. He wants to sell the oil by filling the two kinds of oil in tins of equal volumes. What is the greatest of such a tin?

(a)10 **(b)20** (c)30 (d)40

1. Sandeep has a cubic wooden block of height 8 inches. Pankaj has the block of the height 12 inches. How many inches of wood should each of them need, to build an equal height structure?

(a)2 **(b)4** (c)8 (d)12

1. A garden consists of 135 rose plants planted in a certain number of columns. There are another set of 225 marigold plants which is to be planted in the same number of columns. What is the maximum number of columns in which they can be planted?

(a)10 (b)20 (c)30  **(d)45**

1. A man was employed on the promise that he will be paid the highest wages per day. The contract money to be paid was Rs. 1189. Finally he was paid only Rs. 1073. For how many days did he actually work?

(a)29 **(b)37** (c)30 (d)40

1. A heap of coconuts is divided into groups of 2, 3 and 5 and each time one coconut is left over. The least number of Coconuts in the heap is ?

(a)29 (b)30 (**c)31** (d)32