HCF and LCM Test

Instruction: In the following questions, select the correct choice among the alternatives given below the question.

- 1. How many numbers between 400 and 500 are exactly divisible by 12, 15 and 20?
 - (a) one (b) two (c) three (d) none of these
- 2. Find the numbers between 200 and 300, which when divided by 6, 8 or 9 leaves remainder 8 in each case.

(a) 216, 288 (b) 224, 296 (c) 210, 240 (d) 224, 288

- 3. The HCF and LCM of two numbers are 21 and 4641 respectively. If one of the numbers lies between 200 and 300, find out the two numbers
 (a) 273, 357
 (b) 210, 340
 (c) 215, 314
 (d) 210, 252
- 4. Find the greatest number which can divide 284, 698 and 1618 leaving the same remainder 8 in each case.

5. Find the largest number which divides 62, 132 and 237 to leave the same remainder in each case.

(a) 21 (b) 30 (c) 35 (d) 40

6. Find the largest number of four digits exactly divisible by 12, 15, 18 and 27.

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(a) 9720 (b) 9937 (c) 9999 (d) 9921
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7. Find the smallest number of five digits exactly divisible by 16, 24, 36 and 54.

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(a) 10244 (b) 10296 (c) 10368 (d) 10291
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8. Two numbers are in the ratio of 15 : 11. If their HCF is 13 then the numbers are:

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(a) 105, 77 (b) 15, 11 (c) 195, 143 (d) 75, 55
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- 9. The sum of two numbers is 216 and their HCF is 27. The numbers are :(a) 27, 189(b) 154, 162(c) 108, 108(d) 81, 189
- 10.The sum of two numbers is 528 and their HCF is 33. The number of pairs of such numbers satisfying the above condition is:
 - (a) 6 (b) 12 (c) 8 (d) 4

11. The HCF of $\frac{9}{10}$, $\frac{12}{25}$, $\frac{18}{35}$ and $\frac{21}{40}$ is: (a) $\frac{3}{5}$ (b) $\frac{252}{5}$ $(c) \frac{3}{1400}$ (d) 52 140 12. The LCM of $\frac{2}{3}, \frac{3}{5}, \frac{4}{7}, \frac{9}{13}$ is: (c) $\frac{1}{1365}$ (d) $\frac{12}{455}$ (b) $\frac{1}{36}$ (a) 36 13. Five bells first begin to toll together and then at intervals of 3, 5, 7, 8 and 10 seconds. Find after what intervals they will again toll together. How many times does they toll together in one hour? (a) 14 min., 3 times (b) 12 min., 4 times (d) 12 min., 3 times (c) 14 min., 4 times 14. The LCM of 5, 8, 12, 20 will not be a multiple of: (a) 3 (b) 9(c) 8(d) 515. The LCM of $(16 - x^2)$ and $(x^2 + x - 6)$ is: (a) $(x - 3) (x + 3) (4 - x^2)$ (b) 4 (4 - x^2) (x + 3) (d) $(16 - x^2)(x - 2)(x + 3)$ (c) $(4 - x^2)(x - 3)$ **16.GCD of** $(x^2 - 4)$ and $(x^2 + x - 6)$ is : (c) $(x^2 - 2)$ (b) (x - 2)(d) $(x^2 + 2)$ (a) (x+2)17. Four bells ring at the interval of 6, 8, 12 and 18 seconds. They start ringing together at 12[°]0 clock. after how many seconds will they ring together again? (b) 84 (a) 72 (c) 60(d) 4818.In the above question, find how many times they will ring together during the next 12 minutes? (a) 9 (b) 10 (c) 11 (d) none of these 19.Six bells commence tolling together and toll at intervals of 2, 4, 6, 8, 10 and 12 seconds respectively. In 30 minutes, how many times do they toll together? (a) 4 (b) 10 (c) 15 (d) 16 20.An electric wire is sold only in multiple of 1 metre and a person required several lengths of wire. Each 85 cm long. To avoid any wastage and to minimize labour, he should purchase minimum length of: (a) 8.5 m (b) 17 m (c) 85 m (d) 1 m

Answers to the above questions

Questions no.	Answers
1.	(b)
2.	(b)
3.	(b)
4.	(c)
5.	(c)
6.	(a)
7.	(c)
8.	(c)
9.	(a)
10.	(d)
11.	(c)
12.	(a)
13.	(c)
14.	(b)
15.	(d)
16.	(b)
17.	(a)
18.	(b)
19.	(d)
20.	(b)