H.C.F and L.C.M. Problems with Solutions Pdf

1. Find the side of the largest square slabs which can be paved on the floor of a room 5 m 44 cm long and 3 m 74 cm broad.

a. 56

b. 42

c. 38

d. 34

Ans: D

The side of the square slab is the H.C.F. of 544 and 374 cm, i.e., 34.

2. A merchant has 435 litres, 493 litres and 551 litres of three different kinds of milk. Find the least number of casks of equal size required to store all the milk without mixing.

a. 51

b. 61

c. 47

d. 45

Ans: A

Since minimum number of casks are required, the size of the cask is greatest.

Also the cask in three cases are of equal size.

 The size of the cask is the H.C.F. of 435, 493 and 531 which is 29.

3. Find the greatest number which will divide 2112 and 2792 leaving the remainder 4 in each case.

a. 78

b. 68

c. 65

d. 63

Ans: B

Subtract 4 from each of the numbers 2112 and 2792 and then take the H.C.F. of 2108 and 2788.

4. The largest natural number which exactly divides the product of any four consecutive natural number is

a. 6

b. 12

c. 24

d. 120

Ans: C

1 x 2 x 3 x 4 = 24

∴ Required number = 24.

5. Find the least number which when decreased by 11 is divisible by 14, 15, 21, 32 and 60.

a. 4371

b. 3271

c. 3371

d. 3360

Ans: C

Required number = (L.C.M. of 14, 15, 21, 32, 60) + 11

= 3360 + 11 = 3371.