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

1. Three pieces of timber 42 m, 49 m and 63 m long have to be divided into planks of the same length. What is the greatest possible length of each plank?

a. 7 m

b. 14 m

c. 42 m

d. 63 m

Ans: A

Greatest possible length of each plank = (H.C.F. of 42, 49, 63) m = 7m.

2. What is the smallest number which when increased by 3 is divisible by 16, 24, 30 and 32? a. 480 pt to the state of the

c. 472

d. 477

Ans: D

Required number = (L.C.M. of 16, 24, 30 and 32) - 3

= 480 - 3 = 477.

3. Find the greatest number of five digits which becomes exactly divisible by 10, 12, 15 and 18 when 3769 is added to it.

a. 99811

b. 99911

c. 98911

d. 99011

Ans: B

L.C.M. of 10, 12, 15 and 18 = 540.

Dividing (99999 + 3769) by 540, the remainder is 88.

∴ Required number = 99999 – 88 = 99911.

4. Find the least number of five digits which when divided by 8, 12, 16 and 20 leaves remainders 1, 5, 9 and 13 respectively.

- a. 10003
- b. 10093
- c. 10073



: Required number = 10080 - 7 = 10073.

5. A wholesale tea dealer has 408 kilograms, 468 kilograms and 516 kilograms of three different qualities of tea. He wants it all be packed into boxes of equal size without mixing. Find the capacity of the largest possible box.

a. 50

b. 36

- c. 24
- d. 12

Ans: D

The capacity of the box is H.C.F. of 408, 468 and 516, i.e. 12.