Worksheet Ch-10

Factors and multiples

(A) Fill in the blanks.

(1) 1 is a factor of everyone.

(2) 2 is the first even prime number.

(3) The smallest multiple of a number is the number itself.

(4) 0 is a multiple of every number.

(5) Prime numbers are having 2 numbers of factors.

(B) Choose the correct answer.

(6) Every number is a multiple of 1.

(a) 0 (b) 1 (c) 33 (d) None.

⑦ Composite numbers are the numbers having more than two factors i.e other than 1 and the number itself.

(a) 0 (b) 1 (c) 33 (d) None

⑧ Every Composite number can be expressed as a product of all its prime factors.

(a) Prime (b) Composite (c) HCF (d) None

⑨ Composite numbers are having more than 2 factors.

(a) 2 (b) 1 (c) 3 (d) None

(10) When a particular number is a multiple of 2 of more numbers, it is called a Common multiple.

(a) LCM (b) HCF (c) Common multiple

(d) None

Q Answer the following questions.

(11) Write the first five multiples of 18.

Ans First five multiples of 18 = 18, 36, 54, 72, 90.

(12) Find the HCF of 40, 50, and 60 by prime factorization method.

Ans

2	40
5	20
2	4
	2

2	50
5	25
	5

2	60
5	30
2	6
	3

$40 = 2 \times 5 \times 2 \times 2$

$50 = 2 \times 5 \times 5$

$60 = 2 \times 5 \times 2 \times 3$

HCF $= 2 \times 5 = 10$

(13) Find the LCM of 36 and 52 by listing method.

Ans Multiples of 36 = 36, 72, 108, 144, 180, 216, 252, 288, 324, 360, 396, 432, (468)

Multiples of 52 = 52, 104, 156, 208, 260, 312, 364, 416, (468)

So, LCM of 36 and 52 is = 468

⑭ Find the LCM of 15 and 90 by common division method.

5	15, 90
3	3, 18
2	1, 6
3	1, 3
	1, 1

So, The LCM of 15 and 90 is =

$5 \times 3 \times 2 \times 3 = 90$