Evaluation Question Ex-9(B)

(1) Fill in the blanks:

i) On dividing a by 7, quotient = 1 and remainder = 2.

ii) On dividing 18 by 6, quotient = 3, remainder = 0

iii) Factor of a number is exact divisor of the number.

iv) Every number is a factor of itself.

v) Every number is a multiple of itself.

vi) 1 is a factor of every number.

vii) For every number, it's factors are finite and it's multiples are infinite.

viii) x is a factor of y, then y is a multiple of x.

(2) Write all the factors of:

i) 16
Ans 1, 2, 4, 8, 16

ii) 21
Ans 1, 3, 7, 21

iii) 39
Ans 1, 3, 13, 39

iv) 48
A) 1, 2, 3, 4, 6, 8, 12, 16, 24, 48
v) 64 → 1, 2, 4, 8, 16, 32, 64
vi) 98 → 1, 2, 7, 14, 49, 98

(3) Write the first six multiples of:

i) 4
A) 4, 8, 12, 16, 20, 24
ii) 9
A) 9, 18, 27, 36, 45, 54
iii) 11
A) 11, 22, 33, 44, 55, 66
iv) 15
A) 15, 30, 45, 60, 75, 90
v) 18
A) 18, 36, 54, 72, 90, 108
vi) 16
A) 16, 32, 48, 64, 80, 96

(4) The product of two numbers is 36 and their sum is 13. Find the numbers.
A) Since => 36 => 1 × 36
2 × 18
3 × 12
4 × 9
6 × 6
Clearly numbers are 4 and 9 as 4 × 9 = 36 and 4 + 9 = 13.

(5) The product of two numbers is 48 and their sum is 16. Find the numbers.
A) Since = 1 × 48
2 × 24
4 × 12
8 × 6
16 × 3
4 + 12 = 16
4 × 12 = 48
∴ Therefore the nos are 4 and 12.

(6) Write two numbers which differ by 3 and whose product is 54.

Ans Since $54 = 1 \times 54$
2×27
3×18
6×9

Difference $= 9 - 6 = 3$
Product $= 54$

∴ So, the required no. are 6 and 9.

(7) Without making any actual division show that 7007 is divisible by 7.

Ans $7007 = 7000 + 7$
$= 7 \times (1000 + 1) = 7 \times 1001$
= Clearly, 7007 is divisible by 7.

(8) Ans $2300023 = 23 \times$
$2300000 + 23$
$= 23 \times (1000000 + 1)$
$= 23 \times 1000001$
Clearly 23 000 23 is divisible by 23.

(9) i) 11011

Ans $11011 = 11000 + 11$
$= 11 \times (1000 + 1)$
$= 11 \times 1001$
Clearly 11011 is divisible by 11.

ii) 110011

Ans $= 110000 + 11$
$= 11 \times (10000 + 1)$
$= 11 \times 10001$
Clearly 110011 is divisible by 11.

iii) 1100001

A) $= 11000000 + 11$

$= 11 \times (1000000 + 1)$

$= 11 \times 100000 1$

Clearly, 110000 is divisible by 11.

10) i) 1608.

A) $= 1600 + 8.$

$= 8 \times (200 + 1)$

$= 8 \times 201$

Clearly, 1608 is divisible by 8.

ii) 56008

A) $= 56000 + 8$

$= 8 \times (7000 + 1)$

$= 8 \times 7001$

Clearly 56008 is divisible by 8.

iii) 240008

A) $= 240000 + 8$

$= 8 \times (30000 + 1)$

$= 8 \times 30001$

Clearly, 240008 is divisible by 8.