

Divisibility Test① Divisibility Exercise - 5(C)

① Find which of the following are divisible by 2:

- (i) 192 (ii) 1660 (iii) 1101 (iv) 2079.

Ans → A number having its unit digit 2, 4, 6, 8 and 0 are divisible by 2. So, numbers 192 and 1660 are all divisible by 2.

② Find which of the following are divisible by 3:

- (i) 261 (ii) 111 (iii) 6657 (iv) 2574.

Ans → A number is divisible by 3 if the sum of the digits is divisible by 3. So, all the given numbers are divisible by 3.

③ Find which of the following are divisible by 4:

- (i) 360 (ii) 3180 (iii) 5348 (iv) 7756

Ans → A number is divisible by 4 if the number formed by last two digits is divisible by 4.

So, all the given numbers are divisible by 4.

④ Find which of the following are divisible by 5:

- (i) 3250 (ii) 5557 (iii) 39255 (iv) 8204.

Sol → A number having its unit digit is 5 or 0, is divisible by 5. So, numbers 3250, 39255 are divisible by 5.

5) Find which of the following are divisible by 10:

- (i) 5100 (ii) 4613 (iii) 3400 (iv) 8399

Sol. → A number having its unit digit is 0, is divisible by 10. So, numbers 5100 and 3400 are divisible by 10.

6) which of the following numbers are divisible by 11:

- (i) 2563 (ii) 8307 (iii) 95635

Sol. → A number is divisible by 11 if the difference of the sum of digits at the odd places and sum of the digits at even places is zero or divisible by 11. So, 2563 is divisible by 11.

$$2563 = 2 + 5 + 6 + 3$$

$$= 2 + 6 + 5 + 3$$

$$= 8 + 8 = 16$$

$$2 + 6 = 8$$

$$5 + 3 = 8$$

$$8 - 8 = 0$$

$$8307 = 8 + 3 + 0 + 7$$

$$= 8 + 0 + 3 + 7$$

$$= 11 + 10 = 21$$

$$8 + 0 = 8$$

$$3 + 7 = 10$$

$$11 - 10 = 1$$

So, 8307 is not divisible by 11.