Exercise 5 c

ii) 192

A number is divisible by 2 if its unit digit is 0 or an even number. Therefore 192 is divisible by 2.

iii) 1660

A number is divisible by 2 if its unit digit is 0 or an even number. Therefore 1660 is divisible by 2.

iii) 1101

A number is divisible by 2 if its unit digit is 0 or an even number. Therefore 1101 is not divisible by 2.

i) 2079

A number is divisibe by 2 if its unit digit is 0 or an even number. Therefore 2079 is not divisible by 2

ii) 261

A number is divisible by 3 if its sum of digit is divisible by 3.

$261 = 2 + 6 + 1 = 9$

Since 9 is divisible by 3

$\therefore$ 261 is divisible by 3.

iii) 777

A number is divisible by 3 if its sum of digit is divisible by 3

$777 = 7 + 7 + 7 = 21$

Since 21 is divisible by 3.

$\therefore$ 777 is divisible by 3.

iii) 6657

Since 21 is divisible by 3.
∴ 777 is divisible by 3.

iii) 6657

A number is divisible by 3, if its sum of digit is divisible by 3.

6657 = 6+6+5+7 = 24

Since 24 is divisible by 3

∴ 6657 is divisible by 3.

iv) 2574

A number is divisible by 3 if its sum of digit is divisible by 3.

2574 = 2+5+7+4 = 18

Since 18 is divisible by 3

∴ 275 is divisible by 3.

3(i) 360

Ans) A number is divisible by 4 if the two digit number formed by ten's digit and unit digit is divisible by 4.

Since 60 is divisible by 4

∴ 360 is divisible by 4.

(ii) 3180

A number is divisible by 4 if the two digit number formed by ten's digit and unit digit is divisible by 4

Since 80 is divisible by 4.

∴ 3180 is divisible by 4.

(iii) 5348

A number is divisible by 4 if the two digit number formed by ten's digit and unit digit is divisible by 4

Since 48 is divisible by 4.

∴ 5348 is divisible by 4.

(iv) 7756

A number is divisible by 4 if the two digit number formed by ten's digit and unit digit is divisible by 4

Since 56 is divisible by 4.

∴ 7756 is divisible by 4.

(v) 3250

(i) 3250

A number is divisible by 5, if its unit digit is 0 or 5

∴ 3250 is divisible by 5

(ii) 5557

A number is divisible by 5, if its unit digit is 0 or 5

∴ 3250 is divisiby by 5.

(iii) 39253

A number is divisible by 5, if its unit digit is 0 or 5

∴ 39253 is divisible by 5

(iv) 8204

A number is divisible by 5, if its unit digit is 0 or 5.

(∴ 8204 is not divisible by 5.

(v) 5100

A number is divisible by 10, if its unit digit is 0

∴ 5100 is divisible by 10.

(ii) 4612

A number is divisible by 10, if its unit digit is 0

∴ 4612 is not divisible by 10.

iii) 3400

A number is divisible by 10, if its unit digit is 0.

∴ 3400 is divisible by 10.

iv) 8399

A number is divisible by 10, if its unit digit is 0.

∴ 8399 is not divisible by 10.

6 (i) 2563

A number is divisible by 11 if the difference between the sum of its digits in even places and sum of its digit in odd places is either 0 or divisible by 11

2+5+6+3

Sum of digits in even places = 2+6 = 8

Sum of digits in odd places = 5+3 = 8

difference between the sum of digit in even places and sum of digit in odd places = 8-8 = 0

Since 0 is divisible by 11

∴ 2563 is divided by 11

ii) 8307

A number is divisible by 11 if the difference between the sum of the digits in even places and sum of its digits in odd places is either 0 / divisible by 11

8+3+0+7

Sum of digit in even places = 8+0 = 8

Sum of digit in odd places = 3+7 = 10

difference is the sum of the digits in even places and odd places

= 10-8 = 2

Since 2 is not divisible by 11

∴ 8307 is not divisible by 11.

(iii) 95635

A number is divisible by 11, if the difference between the sum of digit in even place and sum of digits in odd places is 0 or divisible by 11.

9+5+6+3+5

Sum of digit in even place = 9+6+5 = 20

Sum of digit in odd place = 5+3 = 8

difference between the sum of digit in even place and sum of digits in odd places is 20 − 8 = 12

Since 12 is not divisible by 11.

∴ 95635 is not divisible by 11.