Ex 9C

(11) i) 352:-
The given no. = 352
digit at units place = 2
Hence the no. is divisible by 2.

ii) 523:-
The given no. = 523
digit at units place = 3
Hence, the no. is not divisibly by 2.

iii) 496:-
The given no. = 496.
Digit at units place = 6
Hence, the no. is divisible by 2.

iv) 649:- The given no. = 649
Digit at units place = 9
Hence the no. is not divisible by 2.

(12) i) 222:-
The given no. = 222
the no. formed by ten's and unit digit is 22, which is not divisible by 4.
Hence, the no. is not divisible

ii) by 4

iii) 532 :-

The given no. = 532
The no. formed by ten's and unit digit is 32, which is divisible by 4.
Hence, the no. is divisible by 4.

iii) 678 :-

The given no. formed by ten's and unit digit is 78, which is not divisible by 4.
Hence, the no. is not divisible by 4.

iv) 9232 :-

The given no. = 9232
The no. formed by ten's and unit digit is 32, which is divisible by 4.

~~(3) Find~~

(3) i) 324 :-

The given no. = 324
The no. formed by hundred's, ten's and unit digit is 324, which is not divisible by 8.
Hence, 324 is not divisible by 8.

ii) 2536 :-
The given no. = 2536
The no. formed by hundreds ten's and unit digit is 536, which is divisible by 8.
Hence, 2536, is divisible by 8

iii) 92760
The given no. = 92760
The no. formed by hundred's ten's and unit digit is 760, which is divisible by 8.
Hence, 92760 is divisible by 8.

iv) 444320
The given no. = 444320
The no. formed by hundred's, ten's and unit digit is 320, which is divisible by 8.
Hence, 444320 is divisible by 8.

(9) i) 221
The given no. = 221
For a no. to be divisible by 3, sum of digits must be divisible by 3.
Sum of digits = 2+2+1 = 5
Since 5 is not divisible by 3
Hence, 221 is not divisible by 3.

ii) 543 :-
The given no. = 543

for a no. to be divisible by 3,
sum of digits must be divisible by 3
sum of digits = 5+4+3 = 12
since 12 is divisible by 3.
Hence, 543 is divisible by 3.

ii) 28492
The given no. = 28492
For a no. to be divisible by 3,
sum of digits = 2+8+4+9+2 = 25
since 25 is not divisible by 3
Hence, 28492 is not divisible by 3.

iv) 92349
The given no. = 92349
For a number to be divisible by 3, sum of digits = 9+2+3+4+9 = 27
Since 27 is divisible by 3
Hence, 92349 is divisible by 3.

(5) i) 1332
The given no = 1332
for a no. to be divisible by 9,
sum of digits must be divisible by 9.
sum of digits = 1+3+3+2 = 9
since 9 is divisible by 9
Hence, 1332 is divisible by 9.

ii) 53247

The given no. = 53247

for a no. to be divisible by 9

sum of digits must be divisible by 9

sum of digits = 5+3+2+4+7 = 21

since 21 is not divisible by 9

Hence, 53247 is not divisible by 9.

iii) 4968

The given no. = 4968

for a no. to be divisible by 9

sum of digits must be divisible by 9.

sum of digits = 2+0+0+3+1+4 = 10

since 10 is not divisible by 9

Hence, 200314 is not divisible by 9.

(6) i) 324 :-

The given no. = 324

sum of digits = 3+2+4 = 9

which is divisible by 3

therefore 324 is divisible by 6.

ii) 2010 :-

The given no. = 2010

sum of digits = 2+0+1+0 = 3

which is divisibly by 3.

therefore, 2010 is divisible by 6

(iii) 33278:-
The given no. = 33278
Sum of digits = 3+3+2+7+8 = 23
Unit digit is 3, which is odd
Therefore, 33278 is not divisible by 6.

(iv) 15505
The given no. = 15505
Sum of digits = 1+5+5+0+5 = 16
which is divisible by 2
Therefore, 15505 is divisible by 6.

(v) 5080
The given no. = 5080
For a no. to be divisible by 5, units digit is 0
Here, unit digit is 0
Therefore, 5080 is divisible by 5

(vi) 66666:-
The given no. = 66666
For a no. to be divisible by 5 unit's digit must be 0 or 5
Here, unit digit is 6
Therefore, 66666 is not divisible by 5.

iii) 755:-
The given no. = 755
For a no. to be divisible by 5, units digit must be 0 or 5
Here, unit digit is 5.
Therefore, 755 is divisible by 5.

iv) 9207
The given no. = 9207
For a no. to be divisible by 5, units digit must be 0 or 5
Here, unit digit is = 7
Therefore, 9207 is not divisible by 5.

(c) (i) 9990:-
The given no. = 9990
For a no. to be divisible by 10

ii) 0:-
The given no. = 0
for a no. to be divisible by 10, units digit must be 0
Here, unit digit is = 0
therefore, 0 is divisible by 10

iii) 847:-
The given number = 847
For a no. to be divisible by 10,

unit's digit must be 0
Here, unit digit is 7
Therefore, 847 is not divisible by 10

iv) 8976

The given no. = 8976
For a no. to be divisible by 10

(9) i) 5918 :-

The given no. = 5918
If the difference of sum of its digit in odd places from left side and sum of digits in even places from left side is divisible by 11 then the no. is divisible by 11.

Sum of digits at odd places =
5 + 1 = 6

Sum of digits at even places
= 9 + 8 = 17
Difference = 17 − 6 = 11
Here, the difference is 11 which is divisible by 11
Hence, the no. is divisible by 11.

ii) 68717:-
The given no. = 68717
If the difference of sum of its digit in odd places from left side and sum of digits in even places from left side is divisible by 11 then the number is divisible by 11

Sum of digits at odd places = 8+1=9

Difference = 20-9=11

Here, difference is 11 which is divisible by 11

Hence the no. is divisible by 11.

iii) 3882:-
The given no. = 3882
If the difference of sum of its digit in odd places from left side and sum of digits in even places from left side is divisible by 11 then the number is divisible by 11

sum of digits at even places
= 8+2=10

Difference = 11 − 10 = 1
Here, difference is 1 which is not divisible by 11
Hence, the no. is not divisible by 11

iv) 10857
The given no. = 10857
If the difference of sum of its digit in odd places from left side and sum of digits in even places from left side is divisible by 11

sum of digits at odd places = 1 + 8 + 7 = 16

sum of digits at even places = 0 + 5 = 5
Difference = 16 − 5 = 11
Hence, the no. is divisible by 11.

(10) i) 960 :-
The given no. = 960
For a no. to be divisible by 15 it should be divisible by both 3 and 5.

Sum of digits = 9 + 6 + 0 = 15
Since 15 is divisible by 3
So, the no. is divisible by 3.
Here, unit digit is 0, so it is divisible by 5
Hence, the no is divisible by 15

ii) 8295 :-

The given no. = 8295

For a no. to be divisible by 15 it should be divisible by both 3 and 5

Sum of digits = 8+2+9+5 = 24

since 24 is divisible by 3

Here, unit digit is 5, so it is divisible by 5

iii) 6243

The given no. = 6243

For a no. to be divisible by 15 it should be divisible by both 3 and 5

Sum of digits = 6+2+4+3 = 15

since 15 is not divisible by 3

Here, unit digit is 3, so it is not divisible by 5

Hence the no. is not divisible by 15