Exc 9(C)

1. (i) 352

Yes, 352 is divisible because in one's place there is a even number.

(ii) 523

No

(iii) 496

Yes

(iv) 619

No.

2. (i) 222

No

(ii) 543

No

(iii) 678

No

(iv) 44320

Yes

3. (i) 324
No

(ii) 2536
Yes

(iii) 92760
Yes

(iv) ~~200314~~ (iv) 92349
~~Yes~~ No

(or)

4. (i) 2+2+1
= 5
No

(ii) 5+4+3
= 12
Yes

(iii) ~~2849~~ 2+8+4+9
~~28~~ = 23
No

(iv) 9+2+3+4+9
= 27
Yes

5. (i) 1+3+3+2
= 9
Yes

(ii) 5+3+2+4+7
= 21
No

(iii) 2+8+4+9+2
= 25

(iv)

(iii) 4+9+6+8
= 27
Yes

(iv) 2+0+0+3+1+4=10
No

6. (i) 3+2+4 = 9 Divisible by 3

Yes

(ii) 2+0+1+0+3 = 3 Divisible by 3

Yes

(iii) 3+3+2+7+8 = 23 Divisible by 3

No

(iv) 1+5+5+0+5 = 16 Divisible by 2

Yes

7. (i) 5080 = Yes

(ii) 66666 - No

(iii) 755 - Yes

(iv) 9207 - No

8. (i) 9990 → Unit digit is 0

9990 is Divisible by 10

(ii) 0

0 is Divisible by 10

(iii) 847

Not divisible by 10

(iv) 8976

Not divisible by 10

9. (i) 5918

Sum of digits at odd places = 5 + 1 + 6
Sum of digits at even places = 9 + 8 = 17

17 − 6 = 11

Yes

(ii) 68717

6 + 7 + 7 = 20
8 + 1 = 9

20 − 9 = 11

Yes

(iii) 3+8=11
8+2=10

11-10=1

No

(iv) 1+8+7=16
0+5=5

16-5=11

Yes

10. (i) 960

9+60
=15 is divisible by 3

Yes

(ii) 8295

8+2+9+5
=24 is divisible by 3
Yes

(iii) 10243

1+0+2+4+3=
10 is not divisible by 3

No

(iv) 5013

5+0+1+3=9

9 is divisible by 3

11.(i) 61113

The given number = 61,113
For a number to be divisible by 3 sum of digits must be divisible by 3
Sum of digits = 6+1+1+3=13
The number which is divisible by 3 next to 13 is 15
Required smallest number = 15-13=2.
Hence value of M is 2

(ii) 4+6+4+6=20

21-20=1

(iii) 2+7+5+3=17

18-17=1

12.(i) 76M91

The given number is 76M91
For a number to be divisible by 9 sum of digits must be divisible by 9
Sum of digits = 7+6+9+1=23
The number which is divisible by 9

next to 23 is 27
Required smallest number = 27 - 23 = 4
Hence the value of M is 4

(ii) 77548M

The given number = 77548M
For a number be divisible by 9 sum digit must be divisible by 9
Sum of digits = 7 + 7 + 5 + 4 + 8 = 31
The number which is divisible by 9 next to 31 = 36
Required smallest number = 36 - 31 = 5
Hence the value of M is 5

(iii) The given number = 627M9
For a number to be divisible by 9 sum of digits must be divisible by 9
Sum of digits = 6 + 2 + 7 + 9 = 24
The number which is divisible by 9 next to 24 is 27
Required smallest number = 27 - 24 = 3
Hence the value of M is 3

13. (i) 39M2

$11-(3+M)=0$
$11-3-M=0$
$8-M=0$
$M=8$

(ii) 3M422

$9-(M+2)=0$
$\Rightarrow 9-M-2=0$
$9-2=M$
$M=7$

(iii) 70975M

$21-(7+M)=0$
$21=7+M$
$M=14$

(iv) $11-(6+M)=0$
$11=6+M$
$M=11-6$
$M=5$

14. (i) False

(ii) True

(iii) True

(iv) True