

C. 60
2/7/21

Ex-9 (C)

Divisibility by 11

9) i) 5918

$$\begin{array}{r} \text{Ans. } 5918 \\ \underline{432} \\ \hline \end{array}$$

$$\begin{array}{l} S_{\text{odd}} = 17 \\ S_{\text{even}} = 6 \end{array}$$

$$\begin{array}{l} \text{The difference: } S_{\text{odd}} - S_{\text{even}} \\ = 17 - 6 \\ = 11 \end{array}$$

5918 is divisible by 11

iv) 10857

$$\begin{array}{r} \text{Ans } 10857 \\ \underline{5432} \\ \hline \end{array}$$

$$\begin{array}{l} S_{\text{odd}} = 7 + 8 + 1 = 16 \\ S_{\text{even}} = 5 + 0 = 5 \end{array}$$

$$\begin{array}{l} \text{The difference:} \\ = 16 - 5 \\ = 11 \end{array}$$

10857 is divisible by 11

10)

i) 960

$$\begin{array}{l} \text{Ans) } 960 \div 3 = 960 = 15, \text{ yes} \\ \quad \quad \quad 960 \div 5 = 960 = \text{yes} \end{array}$$

So 960 is divisible by 960

ii) 8295

$$\begin{array}{l} \text{Ans) } 3 = 8 + 2 + 9 + 5 = 24 \\ \quad \quad \quad 5 = 8295 = \text{yes} \end{array}$$

Yes divisible.

iii) 10243

Ans $3 = 1+0+2+4+3 = 10$ No
 $5 = 10243 = \text{No.}$
 Not divisible.

iv) 5013

Ans $5 = 5013 = \text{No}$
 $3 = 5+0+1+3 = 9$ No
 No not divisible

i)

iii) ~~64M3~~ 27M53

Ans) $2+7=9$
 $5+3=8$
 $= 27 \nmid 53 = M=1$

ii) M

Ans) $M=1$

i) 64M3

Ans) $M=2$

12) i) 76M91

Ans) $7+6=13$
 $9+1=10$
 $= M=4$

ii) 77548M

Ans) $7+7+5+4+8=31$
 So $M=5$

C.W
1
15

(3) i) 39M2

$$\begin{array}{r} 39M2 \\ \underline{43} \quad \underline{2} \quad \underline{1} \end{array}$$

$$S_0 = M + 3 = 108$$

$$S_1 = 4 + 9 + 2 = 15$$

ii) 3M422

Ans)
$$\begin{array}{r} 3M422 \\ \underline{5} \quad \underline{4} \quad \underline{3} \quad \underline{2} \quad \underline{1} \end{array}$$

$$S_0 = 2 + 4 + 3 = 9$$

$$S_1 = 2 + M + 2 = 97$$

$$M = 7$$

iii) 27M53

Ans)
$$\begin{array}{r} 27M53 \\ \underline{5} \quad \underline{4} \quad \underline{3} \quad \underline{2} \quad \underline{1} \end{array}$$

$$S_0 = 3 + M + 2 = 5$$

$$S_1 = 2 + 2 = 4$$

$$= P = 7 + 6$$

$$8 = 3 + 5$$

$$1 = M = 2 + 5 + 6 = 13$$