H/W EXERCISE 9(C)

1 (i). 352 - ~~All the even nos are~~ divisible by 2. i.e. when {0, 2, 4, 6, 8 are in the units place.} So, As, 352 is a even no. it is divisible by 2.

(ii) 523 - All the even nos. are divisible by 2 i.e. when {0, 2, 4, 6, 8 are in the units place.} So, as 523 is a odd no. it is not divisible by 2.

(iii) 496 - All the even nos. are divisible by 2 i.e. when {0, 2, 4, 6, 8 are in the units place.} So, as 496 is a even no. it is divisible by 2.

2(i) 222 - If the last two nos. are divisible by 4, so, it is divisible by 4. As 222 have 22 as the last no. so it is not divisible by 4.

1 (iv) 649 - If the units place have, 0, 2, 4, 6, 8 as the no's. so it is divisible by 2.
As the units place consist 9 as the digit is so, it is not divisible by 2.

2.(ii) 532 - If the last two digits are divisible by 4, so, it is divisible by 4.
As 532 have 32 as the last two no.s, so 532 is divisible by 4.

(iii) 678 - If the last two digits are divisible by 4, so, it is divisible by 4.
As 678 have 78 as the the last two no.s, so, 678 is not divisibly by 4

(iv) 9232 = If the last two digits are divisible by 4, so it is divisible by 4. As 9232 have 32 as the last two no.s, so 9232 is divisible by 4.

Date
Page 4

3. Find which of the following numbers are divisible by 8

(i) 324 - The no. formed by the sum of digits of hundreds place, Tens place and units place, is divisible by 8. So the no. is divisible by 8. As 3+2+4 forms 9, so it is not divisible by 8.

(ii) 2536 - The no. formed by the sum of nos. hundreds place, tens place and units place is divisible by 8. So, the no. is divisible by 8. As 2+5+3+6 forms 16, So it is divisible by 8.

(iii) 92760 - The no. formed by the sum of nos. hundreds place, tens place and units place is divisible by 8. So the no. is divisible by 8. 9+2+7+6+0 forms 25. So, it is not divisible by 8.

(iv) 444320 - The no. formed by the sum of nos hundreds place, tens place and units place is divisible by 8. So, the no. is divisible by 8. As 4+4+4+3+2+0 = 17 So, it is not divisible by 8.

4. Find which of the following no's are divisible by 3.

(i) 221 - If the sum of the digits is divisible by 3. So, it is divisible by 3.
As 2+2+1 = 5, so it is not divisible by 3.

(ii) 543 - If the sum of the digits is divisible by 3. So, it is divisible by 3.
As 5+4+3 = 12, So it is divisible by 3.

(iii) 28492 - If the sum of the digits is divisible by 3 so, it is divisible 3. As 2+8+4+9+2 = 25, so it is not divisible by 3.

(iv) 92349 - If the sum of the digit is divisible by 3. So it is divisible by 3.
As 9+2+3+4+9 = 27. So, it is not divisible by 3.

5(i) 1332. If the sum of the digit is divisible by 9. so it is divisible by 9.
As 1+3+3+2 = 9, so it is divisible by 9.

(ii) 53247 - If the sum of the digit is divisible by 9, so it is divisible by 9.
As 5+3+2+4+7 = 21, So it is not divisible by 9.

(iii) 4968 - If the sum of the digits is divisible by 9, so it is divisible by 9. As 4+9+6+8 = 27 so, it is divisible by 9.

(iv) 200314 - If the sum of the digits is divisible by 9, so it is divisible by 9. As 2+0+0+3+1+4 = 10. So, it is not divisible by 9.

6 ~~Find 324~~ If the no. is divisible by both 2 and 3. so it is divisible by 6.

(i) 324 - ~~As 324 divisible by both 2 and 3, so, it is divisible.~~ 324 is divisible by 2. ~~and~~ 3+2+4 = 9. which is divisible by 3. As 324 is divisible by both 2 and 3. so it is divisible by 6.

(ii) 2010 = 2010 is divisible by 2. 2+1+0+0 = 3 which is divisible by 3. As 2010 is divisible by both 2 and 3. So, it is divisible by 6.

(iii) 33278 = 33278 is divisible by 2. 3+3+2+7+8 = 23. As 33278 is not divisible by both 2 and 3. so it is not divisible 6.

(iv) 15505 = 15505 is not divisible by 2
1+5+5+0+5 = 16
which is not divisible by 3.
As, 15505 is not divisible by 2 and 3. So, it is not divisible by 6.

7. If the numbers units place have 5 or 0, So, it divisible by 5.

(i) 5080 - As 5080 have 0 at the units place, So it is divisible 5.

(ii) 66666 - As 66666 have 6 at the units place, so it is not divisible by 5.

(iii) 755 - As 755 have 5 at the units place, so it is divisible 5.

(iv) 9207 - As 9207 have 7 at the units place so, it is not divisible by 5.

8. If the nos. units place have 0, So it is divisible by 10.

(i) 9990 - As the units place have 0 So, 9990 is divisible by 10

(ii) 0 - As the units have only 0. So it is not divisible by 10.

(iii) 847 - As the no's unit's place have 7 . so, 847 is not divisible by 10.

(iv) 8976 - As the nos unit's place have 6 . so 8976 is not divisible by 10

02/07/21

Divisibility Rule for 11 - If the sum of the odd - even nos. digit's is divisible by 11. So it is divisible by 11.

a. If the sum of the no's. digits is divisible by 11. So, it is divisible by 11.

(i) 5918 - As 5+9+1+8 = 23, So it is not divisible by 11

(ii) 68717 - As 6+8+7+1+7 = 29, so it is not divisible by 11.

(iii) 3882 - As 3+8+8+2 = 21, So, it is not divisible by 11

(iv) 10857 - As 1+8+5+7 = 21, So, it is not divisible by 11

C.W
5/06/21

Date
Page

9. Divisibility Rule for 15 = If the no is divisible by both 3 and 5 so, it is divisible by 15.

10. If the no. is divisible by both 3 and 5. So, it is divisible by 15.

(i) 960 - As it is divisible by 5.
9+6+0 = 15 which is divisible by 3. So, 960 is divisible by 15.

(ii) 8295 - As it is divisible by 5.
8+2+9+5 = 24 which is divisible by 3.
So, 8295 is divisible by 15

(iii) 10243 - As it is not divisible by 5.
So, 10243 is not divisible by 15.

(iv) 5013 - As it is not divisible by 5.
So, 5013 is not divisible by 15

11. 64 M3 - 6 + 4 + 3 = 13

So, the smallest ~~number~~

11. (i) 64 M3 - As 6 + 4 + 3 = 13 will
The smallest no. ~~should~~ be 13 + 2 = 15.

(ii) 46 M 46 = As 4 + 6 + 4 + 6 = 20
The smallest no. will be 20 + 4 = 24.

(iii) 27 M 53 = As 2 + 7 + 5 + 3 = 17
The smallest no. will be 17 + 1 = 18.

12(i) 76 M 91 = As 7 + 6 + 9 + 1 = 23.
The smallest no. will be 23 + 4 = 27

(ii) 77548 M = As 7 + 7 + 5 + 4 + 8 = 31
The smallest no. will be 31 + 5 = 36

(iii) 627 M9 = As 6 + 2 + 7 + 9 = 24
The smallest no will be 24 + 3.
= 27.

18(i) 39 M2 = As 3+9+2 ÷ 14.

The smallest no. will be 14+8

= 22

(ii) 5M422 = As 3+4+2+2 = 11

The smallest no will

be 11 itself.

(iii) 769 75 M = As 7+6 0+9+7+5
= 28. The smallest no will be 28 + 5 = 33.

(iv) 14 M 75. = 1+4+7+5 = 17. The smallest no. will be 17 + 5 = 22.

4. (i) If a number is divisible by 4, it is divisible 8. False.

(ii) If a number is a 16 and 24 it is a factor of 48. True.

(iii) If a number is divisible by 18, it is divisible by 3 and 6. True