

Chapter 5 : Playing with Numbers

A : Choose the correct alternatives in each of the following :

(1 × 5 = 5)

- From 1 to 100, how many numbers are exactly divisible by 10?
(a) 7 (b) 8 (c) 9 (d) 10
- Largest number that can be written using three 2's is given by
(a) 222 (b) $(2^2)^2$ (c) 2^{2^2} (d) $(22)^2$
- The difference of any two digit number ab and the number ba by reversing its digits, is exactly divisible by
(a) 9 (b) 11 (c) 9 and 11 both (d) none of these
- If the number $2A3$ is divisible by 9, then A can be replaced by
(a) 3 (b) 4 (c) 5 (d) 6
- Largest three digit number divisible by 5 is
(a) 990 (b) 980 (c) 995 (d) 985

B : Solve the following :

(3 × 5 = 15)

- Find the values of letters and give the reason for the steps involved.

$$\begin{array}{r} (i) \quad 2 \quad A \quad B \\ + \quad A \quad B \quad 1 \\ \hline \quad B \quad 1 \quad 8 \end{array}$$

$$\begin{array}{r} (ii) \quad A \quad B \\ \quad \quad \quad \times 3 \\ \hline \quad C \quad A \quad B \end{array}$$

- Without performing actual subtraction and division, find the quotient when the difference of 985 and 589 is divided by 4.
- If $7251z93$ is a multiple of 11, where z is a digit, then find the value of z .
- Use the consecutive numbers from 8 to 16 to complete the magic box with magic sum 36.

- Find the missing number.

$$\begin{array}{ccc} 4 & 5 & 6 \\ 1 \text{ (50) } 3 & 2 \text{ (70) } 4 & 3 \text{ (?) } 5 \\ 2 & 3 & 4 \end{array}$$