Number Play
Answer Key
WORKSHEET-1

1. (c)   2. (d)   3. (b)   4. (a)   5. (a)   6.   74

7. 25   8. 69   9.   5 : 25, 8 : 18, 12 : 21, 10 : 01

10.

54	92	39	67	85	99	45	17	23

11.   19, 58, 29, 88, 44, 22, 11, 34, 17, 52, 26, 13, 40, 20, 10, 5, 16, 8, 4, 2, 1

12.   89998   13.   9500   14.   20 times

15.

$$\begin{array}{r} 9210 \\ -1029 \\ \hline 8181 \end{array} \quad \begin{array}{r} 8811 \\ -1188 \\ \hline 7623 \end{array} \quad \begin{array}{r} 7632 \\ -2367 \\ \hline 5265 \end{array} \quad \begin{array}{r} 6552 \\ -2556 \\ \hline 3996 \end{array} \quad \begin{array}{r} 9963 \\ -3699 \\ \hline 6264 \end{array}$$

$$\begin{array}{r} 6642 \\ -2466 \\ \hline 4176 \end{array} \quad \begin{array}{r} 7641 \\ -1467 \\ \hline 6174 \end{array}$$

After 7 steps we get Kaprekar's constant

WORKSHEET-2

1. (d)   2. (d)   3. (b)   4. (b)   5. (c)

6.   3 : 03, 3 : 13, 3 : 23, 3 : 33, 3 : 43, 3 : 53

7.   01-02-2010, 11-02-2011, 02-02-2020

8.   67   9.   333, 666, 999, 363, 393, 636, 696, 939, 969

10.   3524 is the number

$$\begin{array}{r} 8730 \\ -3078 \\ \hline 5652 \end{array} \quad \begin{array}{r} 6552 \\ -2556 \\ \hline 3996 \end{array} \quad \begin{array}{r} 9963 \\ -3699 \\ \hline 6264 \end{array} \quad \begin{array}{r} 6642 \\ -2466 \\ \hline 4176 \end{array} \quad \begin{array}{r} 7641 \\ -1467 \\ \hline 6174 \end{array}$$

11.   Greatest 5-digit number = 77510

Smallest 5-digit number = 10057

Sum = 77510 + 10057 = 87567

12.   76310, 10367, difference = 65943

13.   22, 11, 34, 17, 52, 26, 13, 40, 20, 10, 5, 16, 8, 4, 2, 1

14.   ₹ 3000   15.   7700, 8500, 9800

Case Study Based Questions

1. (i)   c   (ii)   d   (iii)   b   (iv)   a
2. (i)   d   (ii)   c   (iii)   a   (iv)   d

Assertion & Reason

1.   D   2.   B   3.   A