Mathematics

(Chapter – 11) (Algebra) (Practice Test 4)

Class VI

Time: 1 Hour 15 Minutes   **M. M: 25**

General Instructions:

- This question paper contains four sections: A, B, C and D. Each part is compulsory.
- Section A has 5 MCQ of one mark each.
- Section B has 3 questions of two marks each.
- Section C has 3 questions of three marks each.
- Section D has 2 questions of five marks each, attempt any 1 out of 2.
- There is no negative marking.

[Section – A]

1. The rule, which gives the number of matchsticks required to make the matchstick pattern C, is
   (A) 2 n   (B) 3 n   (C) 4 n   (D) 5 n

2. The side of a regular hexagon is l. Its perimeter is
   (A) l   (B) 2l   (C) 3l   (D) 6l.

3. Which of the following is an expression with numbers only?
   (A) x + 1   (B) 2x   (C) 1 – x   (D) 3.

4. The radius of a circle is r. Its diameter is
   (A) 2r   (B) 4r   (C) 3r   (D) 6r.

5. The expression for '1 added top' is
   (A) P + 1   (B) p – 1   (C) 1 – p   (D) – 1 – P

[Section – B]

6. If x = 1 and y = 2, then 2x + 3y = ...

7. 4 less than a number x = ...

8. The side of an equilateral triangle is shown by l. Express the perimeter of the equilateral triangle using l.

[Section – C]

9. Complete the table and find the solution of the equation 19 – x = 13

x	2	3	4	5	6	7	8	9	10	- - -
19 – x										

10. The side of a regular hexagon is s cm. Finds its perimeter.

11. Write an algebraic expression for each of the following:
    (a) 3 subtracted from a number y.
    (b) 5 is added to three times a number x.

[Section – D]

12. If x = 2, y = 3 and z = 5, find the value of;
    (a) 2x + y + z
    (b) 4x -y + z

13. Think of a number, add 2 to it and then multiply the sum by 6, the result is 42?

Section – A

1. 3n
2. 6I
3. 3
4. 4r
5. P + 1

Section – B

6. 8
7. X - 4
8. 3I

(Hint: Side of equilateral triangle = l
Perimeter = l + l + l = 3l)

Section-C

9. (Hint: By inspection, we have

x	2	3	4	5	⑥	7	8	9	10	- - -
19 – x	17	16	15	14	⑬	12	11	10	9	- - -

10. (Hint: Each side of a regular hexagon = s
∴ its perimeter = s + s + s + s + s + s = 6s cm

11. The required expression is y – 3

(b) The required expression is 5 + 3x

Section-D

12. (a) 12
$(2 \times 2 + 3 + 5 = 12)$

(b) 10
$(4 \times 2 - 3 + 5 = 10)$

13. Let the no. be x
According to questions
6 (x + 2) = 42
6x + 12 = 42
6x = 30
x = 5