Chapter—6

Square and Square Roots

1. Fill in the blanks—

(i) The digit at unit's place of square of 239 = _____

(ii) $29 \times 31 = \square - 1$

(iii) $17 \times 23 = \square - 3^2$

(iv) $(151)^2 - (150)^2$ = _____

(v) The sum of first five odd numbers = _____

(vi) If $6^x = 1296$ then x = _____

2. Write the perfect square numbers between 100 and 150.

3. Write 17^2 as sum of two consecutive integers.

4. Find the Pythagorean triplet whose smallest number is 10.

5. Find the smallest number by which 192 must be multiplied to make the product perfect square.

6. Find the square root of the following—

(i) 10609 (ii) 33.64 (iii) 0.4489 (iv) $\frac{289}{361}$ (v) $1\frac{7}{9}$

7. Find :

(i) $\sqrt{55} \times \sqrt{220}$

(ii) $\sqrt{0.25} \times \sqrt{0.09}$

8. Find the smallest number of four digits which is a perfect square.

9. Find the smallest square number which is divisible by the numbers 4, 12 and 16.

10. Find x if $\frac{x}{16} = \sqrt{\frac{9}{16}}$

11. The area of a square field is 4225 m^2. If a girl cycles along its boundary, how much distance she will be able to cover if she covers the boundary twice.

12. For the international yoga day, yoga teacher has to arrange 1024 students in such a way that each row has as many students as the number of rows. Find the number of students in each row.

13. A square park of side 40 cm has a 4 m wide path surrounding it. Find the area of the path.

14. Find the least number which must be added to 2000 to make the sum a perfect square.

15. State true or false:

(i) The square of an even number is always even.

(ii) 99 is 2-diget greatest perfect square number.

(iii) 248 is a perfect square number.

(iv) Square numbers can have odd number of zeros at the end.