Chapter- 3

Squares and Square roots

WORKSHEET

1 Mark

1. **Multiple Choice Questions**
   196 is the square of
   (a) 11 (b) 12
   (c) 14 (d) 16

2. **Which of the following is a square of an even number?**
   (a) 144 (b) 169
   (c) 441 (d) 625

3. **A number ending in 9 will have the unit's place of its square as**
   (a) 3 (b) 9
   (c) 1 (d) 6

4. **Which of the following will have 4 at the unit's place?**
   (a) 14^2 (b) 62^2 (c) 27^2 (d)35^2

5. **How many natural numbers lie between 5^2 and 6^2?**
   (a) 9 (b) 10 (c)11 (d) 12

6. **Which of the following cannot be a perfect square?**
   (a) 841 (b) 529 (c) 198 (d) All of these

7. **The one's digit of the cube of 23 is**
   (a) 6 (b) 7 (c) 3 (d) 9

8. **A square board has an area of 144 sq units. How long is each side of the board?**
   (a) 11 units (b) 12 units (c) 13 units (d) 14 units

9. **The sum of successive odd numbers 1, 3, 5, 7, 9, 11, 13 and 15 is**
   (a) 61 (b) 64 (c) 49 (d) 36

10. **The sum of first n odd natural numbers is**
    (a) 2n +1 (b) n^2 (c) $n^2 -1$ (d) $n^2 +1$

11. **Write the Pythagorean triplet whose one of the numbers is 4**

12. **Using prime factorisation, find the square roots of (a) 11025 (b) 4761**

13. **Is 176 a perfect square? If not;- find the smallest number by which it should be multiplied to get a perfect square.**

14. **Write two Pythagorean triplets, each having one of the numbers as 5.**

15. **By what smallest number should 216 be divided, so that the quotient is' a perfect square? Also, find the square root of the quotient.**

[SQUARES AND SQUARE ROOTS]

16. **Find the square root of the following by long division method.**
(a) 1369 (b) 5625

17. **Find the square root of the following by long division method. : (a) 27.04 (b) 1.44**

18. What is the least number that should be subtracted from 1385 to get a perfect square?

19. What is the least number that should be added to 6200 to make it a perfect square?

20. **Find the least number of four digits that is a perfect square.**

21. Find the greatest number of three digits that is a perfect square.

22. Find the least square, number, which is exactly divisible by 3, 4, 5, 6 and 8.

23. **Find the length of the side of a square, if the length of its diagonal is 10 cm.**

24. A decimal number is multiplied by itself. If the product is 51.84, then find the number.

25. **Find the decimal fraction, which when multiplied by itself, gives 84.64.**