



1. The solution of  $\sqrt{5}$  lies between

- (i) 2.1 and 2.2 (ii) 2.4 and 2.5 (iii) 2.2 and 2.3 (iv) 2.0 and 2.1 (v) 2.3 and 2.4

2. If  $\sqrt{2401} = 49$ , find the value of  $\sqrt{240100}$

- (i) 492 (ii) 49 (iii) 4900 (iv) 488 (v) 490

3. Find the greatest 2 digit number which is a perfect square?

- (i) 78 (ii) 82 (iii) 81 (iv) 83 (v) 80

4. Find the greatest 5 digit number which is a perfect square?

- (i) 99855 (ii) 99859 (iii) 99854 (iv) 99857 (v) 99856

5. The solution of  $\sqrt{20}$  lies between

- (i) 4 and 5 (ii) 3 and 4 (iii) 6 and 7 (iv) 2 and 3 (v) 5 and 6

6. Find the smallest 2 digit number which is a perfect square?

- (i) 18 (ii) 17 (iii) 16 (iv) 13 (v) 15

7. If  $\sqrt{121} = 11$ , find the value of  $\sqrt{1210000}$

- (i) 1102 (ii) 1100 (iii) 11000 (iv) 110 (v) 1098

8. Find the smallest 3 digit number which is a perfect square?

- (i) 103 (ii) 101 (iii) 99 (iv) 100 (v) 97

9. Find the smallest 5 digit number which is a perfect square?

- (i) 10000 (ii) 9999 (iii) 10001 (iv) 10002 (v) 9997

10. If a number has 3 zeros at the end, its square has how many zeros?

- (i) 4 (ii) 6 (iii) 5 (iv) 8 (v) 7

11. Find the square root of  $\frac{4}{9}$

- (i)  $\frac{2}{3}$  (ii) 0 (iii)  $\frac{4}{3}$  (iv) 2 (v)  $\frac{2}{5}$

12. If  $\sqrt{3249} = 57$ , find the value of  $\sqrt{32.49}$

- (i) 5.7 (ii) 57 (iii) 3.7 (iv) 0.6 (v) 7.7

13. Find the number of numbers between  $15^2$  and  $16^2$

- (i) 27 (ii) 29 (iii) 30 (iv) 31 (v) 32

14. Identify the Pythagorean triplet whose largest number is 37

- (i) {11,36,37} (ii) {13,34,37} (iii) {12,35,37} (iv) {10,33,37} (v) {14,36,37}

15. If  $\sqrt{3969} = 63$ , find the value of  $\sqrt{0.3969}$

- (i) 2.63 (ii) 0.63 (iii) 0.06 (iv) 8.63 (v) 6.3

16. The smallest number by which 112 must be multiplied so that the product is a perfect square is?

- (i) 5 (ii) 8 (iii) 6 (iv) 9 (v) 7

17. Find the prime factorization of 13440

- (i)  $2^8 \times 3 \times 5 \times 7$  (ii)  $2^7 \times 3 \times 5 \times 7$  (iii)  $2^7 \times 3 \times 2 \times 7$  (iv)  $2^7 \times 5 \times 5 \times 7$  (v)  $2^7 \times 3 \times 5 \times 6$

18. Find the smallest perfect square which is divisible by each of the numbers 14,6,10

- (i) 1261 (ii) 88200 (iii) 44100 (iv) 44102 (v) 2940

19. Find the square root of 2246.5000

- (i) 49.3973 (ii) 45.3973 (iii) 47.3973 (iv) 48.3973 (v) 46.3973

20. The solution of  $\sqrt{10}$  lies between

- (i) 3.163 and 3.164 (ii) 3.161 and 3.162 (iii) 3.164 and 3.165 (iv) 3.160 and 3.161 (v) 3.162 and 3.163

21. Express  $23^2$  as the sum of two consecutive integers

- (i)  $262 + 267$  (ii)  $266 + 263$  (iii)  $263 + 264$  (iv)  $264 + 265$  (v)  $265 + 266$

22. Find the least number that must be added to 191 to get a perfect square?

- (i) 3 (ii) 6 (iii) 4 (iv) 8 (v) 5

23. How many digits are there in the square root of 400689?

- (i) 2 (ii) 3 (iii) 1 (iv) 5 (v) 4

24. What is the unit place digit in the square of 26?

- (i) 8 (ii) 1 (iii) 2 (iv) 7 (v) 6

25. Which of the following is a Pythagorean triplet?

- (i) {20,101,100} (ii) {20,98,100} (iii) {20,99,101} (iv) {20,100,102} (v) {20,97,101}

## Assignment Key

|           |           |          |          |          |           |
|-----------|-----------|----------|----------|----------|-----------|
| 1) (iii)  | 2) (v)    | 3) (iii) | 4) (v)   | 5) (i)   | 6) (iii)  |
| 7) (ii)   | 8) (iv)   | 9) (i)   | 10) (ii) | 11) (i)  | 12) (i)   |
| 13) (iii) | 14) (iii) | 15) (ii) | 16) (v)  | 17) (ii) | 18) (iii) |
| 19) (iii) | 20) (v)   | 21) (iv) | 22) (v)  | 23) (ii) | 24) (v)   |
| 25) (iii) |           |          |          |          |           |