



1. Find the value of  $6^3 - 5^3$   
(i) 91 (ii) 88 (iii) 92 (iv) 93 (v) 90
2. What is the unit place digit in the square of 20?  
(i) 3 (ii) 2 (iii) 8 (iv) 6 (v) 0
3. Which of the following is a Pythagorean triplet?  
(i) {18,78,82} (ii) {18,81,83} (iii) {18,82,81} (iv) {18,80,82} (v) {18,79,81}
4. The solution of  $\sqrt{11}$  lies between  
(i) 3.317 and 3.318 (ii) 3.315 and 3.316 (iii) 3.316 and 3.317 (iv) 3.318 and 3.319 (v) 3.314 and 3.315
5. Identify the Pythagorean triplet whose middle number is 80  
(i) {18,80,82} (ii) {19,80,81} (iii) {20,80,82} (iv) {19,80,79} (v) {17,80,81}
6. Find the smallest 5 digit number which is a perfect square?  
(i) 10001 (ii) 9998 (iii) 10000 (iv) 9999 (v) 10002
7. Find the cube root of 125  
(i) 5 (ii) 2 (iii) 6 (iv) 4 (v) 8
8. Find the smallest 4 digit number which is a perfect square?  
(i) 1024 (ii) 1025 (iii) 1021 (iv) 1023 (v) 1027
9. If a number has 5 zeros at the end, its square has how many zeros?  
(i) 10 (ii) 7 (iii) 11 (iv) 12 (v) 9
10. The smallest number by which 1125 must be multiplied so that the product is a perfect cube is?  
(i) 3 (ii) 2 (iii) 4 (iv) 1 (v) 0
11. If  $\sqrt{256} = 16$ , find the value of  $\sqrt{2560000}$   
(i) 16000 (ii) 1598 (iii) 1602 (iv) 1600 (v) 160
12. Find the greatest 4 digit number which is a perfect square?  
(i) 9799 (ii) 9800 (iii) 9804 (iv) 9801 (v) 9802
13. Find the square root of 9699.6000  
(i) 99.4865 (ii) 96.4865 (iii) 98.4865 (iv) 100.4865 (v) 97.4865
14. Find the greatest 5 digit number which is a perfect square?  
(i) 99857 (ii) 99856 (iii) 99859 (iv) 99855 (v) 99854

15. Find the least number that must be added to 1015 to get a perfect square?

- (i) 12 (ii) 8 (iii) 10 (iv) 7 (v) 9

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

- (i) 19 (ii) 16 (iii) 15 (iv) 13 (v) 17

17. Find the square root of 313.798

- (i) 15.714 (ii) 16.714 (iii) 18.714 (iv) 19.714 (v) 17.714

18. Find the least number that must be subtracted from 132 to get a perfect square?

- (i) 10 (ii) 9 (iii) 12 (iv) 11 (v) 14

19. Find the square root of  $\frac{16}{9}$

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

20. The solution of  $\sqrt{2}$  lies between

- (i) 1.4143 and 1.4144 (ii) 1.4144 and 1.4145 (iii) 1.4141 and 1.4142 (iv) 1.4140 and 1.4141  
(v) 1.4142 and 1.4143

21. Find the prime factorization of 1320

- (i)  $2^3 \times 3 \times 2 \times 11$  (ii)  $2^3 \times 3 \times 5 \times 11^2$  (iii)  $2^3 \times 3 \times 4 \times 11$  (iv)  $2^3 \times 3 \times 5 \times 11$  (v)  $5^3 \times 3 \times 5 \times 11$

22. Which of the following is not a perfect cube?

- (i) 8 (ii) 125 (iii) 346 (iv) 27 (v) 1000

23. Express  $5^2$  as the sum of two consecutive integers

- (i) 11 + 12 (ii) 10 + 15 (iii) 14 + 11 (iv) 13 + 14 (v) 12 + 13

24. Find the prime factorization of 36

- (i)  $2^2 \times 3^2$  (ii)  $4^2 \times 3^2$  (iii)  $2^3 \times 3^2$  (iv)  $(-1)^2 \times 3^2$  (v)  $2 \times 3^2$

25. Which of the following is not a perfect square?

- (i) 100 (ii) 1 (iii) 675 (iv) 196 (v) 64

## Assignment Key

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

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