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(Affiliated to CBSE up to +2 Level)

CLASS: VIII

SUB.: MATHS (NCERT BASED)

DATE: 18-07-2020

## MCQ

1. Which of the following can be a perfect square?

- (i) A number ending in 3 or 7                      (ii) A number ending with odd number of zeros  
(iii) A number ending with even number of zeros      (iv) A number ending in 2.

2. Which of the following can be the square of a natural number 'n'?

- (i) sum of the squares of first n natural numbers      (ii) sum of the first n natural numbers  
(iii) sum of first (n - 1) natural numbers              (iv) sum of first 'n' odd natural numbers.

3. Which of the following is the number non-perfect square numbers between the square of the numbers n and n + 1?

- (i) n + 1              (ii) n              (iii) 2n              (iv) 2n + 1

4. Which of the following is the difference between the squares of two consecutive natural number is:

- (i) sum of the two numbers                      (ii) difference of the numbers  
(iii) twice the sum of the two numbers      (iv) twice the difference between the two numbers.

5. Which of the following is the number of non-perfect square number between 172 and 182?

- (i) 613              (ii) 35              (iii) 34              (iv) 70

6. Which of the following is the difference between the squares of 21 and 22?

- (i) 21              (ii) 22              (iii) 42              (iv) 43

7. Which of the following is the number of zeros in the square of 900?

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

8. If a number of n-digits is a perfect square and 'n' is an even number, then which of the following is the number of digits of its square root?

- (i)  $\frac{n-1}{2}$               (ii)  $\frac{n}{2}$               (iii)  $\frac{n+1}{2}$               (iv) 2n

9. If a number of n-digits is perfect square and 'n' is an odd number, then which of the following is the number of digits of its square root?

- (i)  $\frac{n-1}{2}$               (ii)  $\frac{n}{2}$               (iii)  $\frac{n+1}{2}$               (iv) 2n

10. Which of the following is a Pythagorean-triplet?

- (i) n, (n<sup>2</sup> - 1) and (n<sup>2</sup> + 1)                      (ii) (n - 1), (n<sup>2</sup> - 1) and (n<sup>2</sup> + 1)  
(iii) (n + 1), (n<sup>2</sup> - 1) and (n<sup>2</sup> + 1)              (iv) 2n, (n<sup>2</sup> - 1) and (n<sup>2</sup> + 1)