SHIKSHA CLASSES

Question Paper

Sub : Maths
Class : VIII (CBSE)

5 : Squares and Square roots

Total Marks : 30
Time : 1 Hour

Section A (Each 1 Mark)

Select the most appropriate answer from the given options (MCQ'S - Q.1 to Q.5)

Q.1 : Between 50 and 60, the perfect square number is

a) 56 b) 55 c) 54 d) None

Q.2 : How many natural numbers lie between 8^2 and 9^2 ?

a) 16 b) 17 c) 18 d) 19

Q.3 : The unit digit in the square of the number 132 is

a) 1 b) 2 c) 3 d) 4

Q.4 : Which of the following is not pythagorean triplet?

a) 3, 4, 5 b) 6, 8, 10 c) 5, 12, 13 d) 2, 3, 4

Q.5 : The smallest number by which 45 shoud be multiplied so as to get a perfect square is

a) 2 b) 3 c) 5 d) 7

Fill in the blank. (Q.6 to Q.7)

Q.6 : $112 + 113 = (\_\_\_\_\_)^2$.

Q.7 : There are _____ non-square numbers between 4^2 and 5^2.

Write whether the following statements are True or False. (Q.8 to Q.9)

Q.8 : The product of two perfect squares is a perfect square.

Q.9 : There is only one perfect square number between 20 and 30:

Section B (Each 2 Marks)

Q.10 : Find the square root of 2304 by prime factorisation method.

OR

Without adding, Find the sum of 1 + 3 + 5 + 7 + 9 + 11 + 12 + 15 + 17 + 19.

Q.11 : Find the square root of 5776 by Division method.

Section C (Each 3 Marks)

Q.12 : Find the least number which must be added to 525, so to get a perfect square. Also find the square root of the perfect square so obtained.

Q.13 : Find the length of the side of a square whose area is $441 m^2$.

Q.14 : In a right triangle ABC, $\angle B = 90^0$, AB = 6cm, BC = 8cm, Find AC

OR

Write a Pythagorean triplet whose one member is 6.

Section D (Each 4 Marks)

Q.15 : Find the smallest square number that is divisible by each of the number 4, 9 and 10.

Q.16 : A garden has 1000 plants. He wants to plant these in such a way that the number of row and the number of columns remain same. Find the minimum number of plants he needs more for this.

OR

There are 500 Children in a school for a P.T. drill they have to stand in such a manner that the number of rows is equal to number of columns. How many children would be left out in this arrangement?

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