**Class – 8th** **Maths Assignment - 3**

**Q.1 The value of** $\sqrt{41+\sqrt{54+\sqrt{88+\sqrt{128+\sqrt{256}}}}}$ **is**

(a) 7 (b) 6 (c) 8 (d) 10

**Q.2 The value of** $\left(\sqrt{\frac{225}{729}}-\sqrt{\frac{25}{144}}\right)\div\sqrt{\frac{16}{81}}$ **is**

(a) $\frac{1}{48}$ (b) $\frac{5}{48}$ (c) $\frac{5}{16}$ (d) $\frac{1}{16}$

**Q.3 If** $\sqrt{0.04\times0.4\times a}=0.04\times0.4\times\sqrt{b}$ **then** $\frac{a}{b}$ **is**

(a) $16\times10^{-3}$ (b) $16\times10^{-4}$ (c) $16\times10^{-5}$ (d) $16\times10^{-6}$

**Q.4 If** $\sqrt{1+\frac{x}{289}}=1\frac{1}{17}$ **then x is equal to**

**Q.5 If a = 0.1039 then the value of 3a -** $\sqrt{4a^2-4a+1}$ **is**

(a) 0.1039 (b) 0.2078 (c) 1.1039 (d) 2.1039

**Q.6 What is the least number which should be subtracted from 326 to make it a perfect square?**

(a) 2 (b) 20 (c) 18 (d) 14

**Q.7 What is the digit at the one's place in the square of the number 2934?**

(a) 4 (b) 6 (c) 1 (d) 5

**Q.8 The square root of 1471369 is**

(a) 1312 (b) 1211 (c) 1219 (d) 1213

**Q.9 The value of** $\sqrt{\frac{0.289}{0.00121}}$ **is**

(a) $\frac{17}{11}$ (b) $\frac{170}{11}$ (c) $\frac{70}{11}$ (d) $\frac{17}{110}$

**Q.10 The value of $\sqrt{0.121}$ up to three of decimal is**

(a) 0.011 (b) 0.11 (c) 0.347 (d) 1.1

**Q.11 The least perfect square, which is divisible by each of 21, 36 and 66 is.**

(a) 213444 (b) 214344 (c) 214434 (d) 231444

**Q.12 Which of the following numbers is a square of odd number?**

(a) 256 (b) 144 (c) 2601 (d) 400

**Q.13 A welfare association collected Rs 52900 as donation from the students. If each paid as many rupees as there were students, find the numbers of students.**

(a) 230 (b) 225 (c) 220 (d) 245

**Q.14 Which of following are Pythagorean triplets?**

(a) (2,3,5) (b) (5,7,9) (c) (6,9,11) (d) (8,15,17)

**Q.15 Which of the following is not true?**

(a) $\sqrt{ab} = (\sqrt{a} \times \sqrt{b})$ (b) $\sqrt{\frac{a}{b}} = \frac{\sqrt{a}}{\sqrt{b}}$

(c) $\sqrt{a+b} = \sqrt{a} + \sqrt{b}$ (d) $(\sqrt{a+b})^2 = a + b$

**Q.16 Sum of the first n odd natural numbers is**

(a) $2n + 1$ (b) $n^2$ (c) $n^2 - 1$ (d) $2n^2 + 1$

**Q.17 The value of $\sqrt{45} \times \sqrt{20}$ is**

(a) 18 (b) 30 (c) 20 (d) 60

**Q.18 A perfect square number can never have the digit ------- at the units place.**

(a) 1 (b) 4 (c) 8 (d) 9

**Q.19 Simplify: $\sqrt{\frac{7\frac{1}{5}}{5}} + \sqrt{\frac{3\frac{1}{8}}{8}} - \sqrt{\frac{8\frac{1}{10}}{10}}$**

(a) $\frac{37}{40}$ (b) $\frac{41}{43}$ (c) $\frac{39}{40}$ (d) $\frac{18}{23}$

**Q.20 How many natural numbers lie between squares of 13 and 14?**

(a) 26 (b) 24 (c) 25 (d) None of these

**Q.21 If $\sqrt{86.49} + \sqrt{5 + k^2} = 12.3$ the k is equal to**

(a) $\sqrt{10}$ (b) $2\sqrt{5}$ (c) $3\sqrt{5}$ (d) 2

**Q.22 If $\sqrt{1369} + \sqrt{0.0615 + x} = 37.25$ then x is equal to**

(a) $10^{-1}$ (b) $10^{-2}$ (c) $10^{-3}$ (d) 10

**Q.23 Find the least number which must be added to 306452 to make it a perfect square.**

(a) 643 (b) 554 (c) 464 (d) 644

**Q.24 The square root of 0.069696 is**

(a) 0.0264 (b) 2.64 (c) 0.264 (d) 26.4

**Q.25 The square of 19 as the sum of two consecutive integers is**

(a) 179+180 (b) 180+181 (c) 182+183 (d) None of these

**Q.26 Find whether 55 is a perfect square or not using repeated subtraction.**

**Q.27 Find the squares of the following numbers containing 5 in the unit's place:**

(i) 15 (ii) 105

**Q.28 How many numbers lie between squares of the following numbers?**

(i) 12 and 13 (ii) 25 and 26 (iii) 99 and 100

**Q.29 Find the smallest number that is divisible by each of the numbers 4, 9 and 10.**

**Q.30 In a right triangle ABC, $\angle B = 90^0$.**

(a) If AB = 6 cm, BC = 8 cm, find AC.

(b) If AC = 13 cm, BC = 5 cm, find AB.

**Q.31 The area of a square field is $101\frac{1}{400}$ square meters. Find the length of one side of the field.**

**Q.32 Find the value of $\sqrt{0.09} + \sqrt{0.81} + \sqrt{7.29} + \sqrt{98.01}$**

**Q.33 If $\sqrt{13 - a\sqrt{10}} = \sqrt{8} + \sqrt{5}$ the find the value of a.**

**Q.34 If 3a = 4b and a + b = $7\sqrt{29}$ then find $\sqrt{a^2 + b^2}$.**

**Q.35 Find the smallest number of seven digits which is a perfect square.**