**CLASS TEST: REAL NUMBERS-X (MATHEMATICS)**

**Time Allowed 30 Minutes** **Maximum Marks: 15**

***General Instructions:***

1. In this question paper have 9 questions.
2. Q1 to Q5 are MCQs each carry 1 mark, Q6 to Q7 are short type Qs each carry 2 marks and Q8 to Q9 are long answer type Qs each carry 3 marks.
3. Write your answer on given space.

**Name of Student:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, Class:\_\_\_\_\_\_\_\_\_\_\_\_, Achieve Marks:\_\_\_\_\_\_\_**

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| **MULTIPLE CHOICE QUESTIONS (Q1-Q5) 1x5=5** |
| **Q.N.** | **Question** | **Answer**(Write the Ans on given space) |
| Q1. | What will be the least possible number of the planks, if three pieces of timber 42 m, 49 m and 63 m long have to be divided into planks of the same length?      (a)   5 (b)   6 (c)   7 (d)   none of these |
| **ANS :** |
| Q2. | If two positive integers a and b are written as a = x3y2 and b = xy3; x, y are prime numbers, then HCF (a, b) is      (a)   xy (b)   xy2 (c)   x3y3 (d)   x2y2 |
| **ANS :** |
| Q3. | Given that LCM (91, 26) = 182, then HCF (91, 26) is:      (a)   13 (b)   26 (c)   7 (d)   9 |
| **ANS :** |
| Q4. | The values of x and y in the given figure are:        https://www.careerlauncher.com/cbse-ncert/class-10/10-math-real-3-UntitOE1.JPG      (a)   x = 10; y = 14 (b)   x = 21; y = 84 (c)   x = 21; y = 25 (d)   x = 10; y = 40 |
| **ANS :** |
| Q5. | The least number that is divisible by all the numbers from 1 to 10 (both inclusive) is      (a)   10 (b)   100 (c)   504 (d)   2520 |
| **ANS :** |
| **SHORT ANSWER TYPE QUESTIONS(Q6-Q7) 2x2=4** |
| Q6. | 4 Bells toll together at 9.00 am. They toll after 7, 8, 11 and 12 seconds respectively. How many times will they toll together again in the next 3 hours? |
| **ANS :** |
| Q7. |  The largest number which divides 70 and 125, leaving remainders 5 and 8 respectively, is? . **OR**Two natural numbers whose sum is 85 and the least common multiple is 102 are: |
| **ANS :** |
| **LONG ANSWER TYPE QUESTIONS(Q6-Q7) 3x2 = 6** |
| Q8. | Prove that https://www.careerlauncher.com/cbse-ncert/class-10/10-math-real-6-UntitOE3.JPG is an irrational number. Given that $√2$ is irrational.  |
| **ANS :** |
| Q9. | Prove that https://www.careerlauncher.com/cbse-ncert/class-10/10-math-real-5-UntitOE3.JPG is irrational. **OR** Prove that$\sqrt{2}+√3$is irrational |
| **ANS :** |