SUBJECT NAME –MATHEMATICS

WORKSHEET 3

TOPIC: REAL NUMBERS

1. Express 7429 in terms of product of its prime factor.

2. Determine prime factorization of 13915.

3. Show that 12n cannot end with digit 0 or 5 for any natural number n.

4. Verify LCM X HCF= product of the integers: 336 and 54.

5. Prove that $\sqrt{5}$ is an irrational number.

6. Prove that 2+$5\sqrt{3} $is an irrational number.

7. Six bells commence tolling together and toll at intervals of 2, 4, 6, 8 10 and 12 seconds respectively. In 30 minutes, how many times do they toll together? (excluding the one at start)

8. The traffic lights at three different road crossings change after every 48 sec, 72 sec and 108 sec respectively. If they all change simultaneously at 8:20:00 hrs, when will they again change simultaneously ?

9. A merchant has 120 ltrs of and 180 ltrs of two kinds of oil. He wants the sell oil by filling the two kinds of oil in tins of equal volumes. What is the greatest of such a tin.

10. Find the least number of square tiles by which the floor of a room of dimensions 16.58 m and 8.32 m can be covered completely.