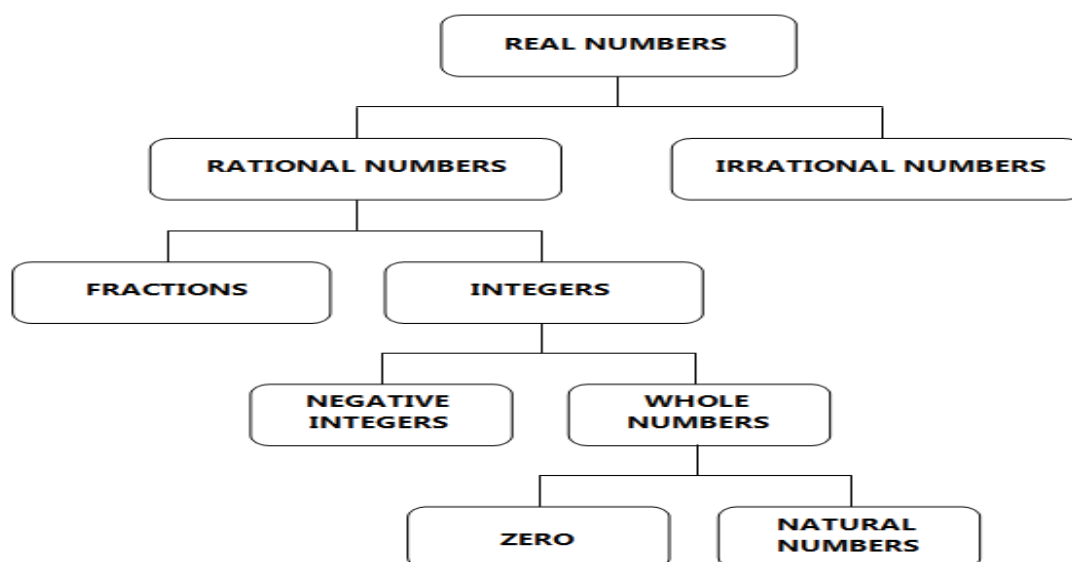# REAL NUMBERS

IMPORTANT FORMULAS & CONCEPTS

The Fundamental Theorem of Arithmetic

Every composite number can be expressed (factorised) as a product of primes, and this factorisation is unique, apart from the order in which the prime factors occur.

Prime and Composite numbers

A prime number is a number which has only two factors i.e. one and itself whereas the composite number is a number which has more than two factors.

HCF and LCM of numbers

HCF is the highest common factor also known as GCD i.e. greatest common divisor.

LCM of two numbers is their least common multiple.

Property of HCF and LCM of two positive integers 'a' and 'b':

HCF (a, b)×LCM (a, b) = a ×b

HCF and LCM by Prime factorization method

➢ HCF (a, b) = Product of the smallest power of each common prime factor in the numbers.

➢ LCM (a, b) = Product of the greatest power of each prime factor, involved in the numbers.

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