

SUBJECT- MATHEMATICS
CLASS – X (2023-24)
TOPIC : REAL NUMBERS

Brief Description:

In this chapter students will learn Fundamental Theorem of Arithmetic, HCF and LCM of numbers, Composite and Prime numbers, Proof of Irrationality.

Previous Knowledge:

Natural numbers, Integers, Rational numbers, Irrational Numbers, Prime Factorisation.

Specific Objectives:

To enable the students to:

S1) State Explain Fundamental Theorem of Arithmetic. **KNOWLEDGE**

S2) Prime factorise the given number. **UNDERSTANDING**

S3) Find HCF and LCM of given numbers. **ANALYSIS**

S4) Solve word problems based on HCF and LCM. **APPLICATION**

S5) Prove irrationality of given irrational numbers. **UNDERSTANDING**

Behavioral Objectives:

To enable the students to:

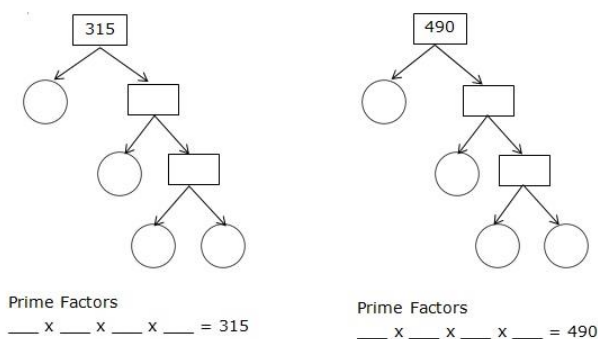
B1) Prove irrational nature of irrational numbers by developing Critical Thinking. **ANALYSIS**

B2) Understand Application of LCF and LCM in real life situation. **APPLICATION**

PROCESS/ACTIVITIES:

ACT – 1:

Students will be asked to complete the factor tree. **UNDERSTANDING**



Assessment –

Class test/Worksheet/Activity :

Marks	Description
3	Complete the factor tree correctly.
2	Write the given composite number as a product of prime factors.
1	Able to explain the Fundamental Theorem of Arithmetic.

ACT – 2 :

Students will be given real life problem based on HCF or LCM. **APPLICATION**

**Real Life Applications
of
GCF and LCM**

How can you tell if a word problem requires
you to use
Greatest Common Factor
or Least Common Multiple
to solve?



Assessment –

Class test/Worksheet/Activity :

Marks	Description
1	Identify which concept will be used in solving the problem (HCF or LCM)
3	Able to solve the problem accurately by applying proper concept.
1	Able to tell/write the final answer with proper units.

Expected Learning Outcomes:

Students will be able to:

- 1) Apply the theorem and analyze the results. **APPLICATION and UNDERSTANDING**
- 2) Find out HCF and LCM of numbers using different methods. **UNDERSTANDING**
- 3) Prove irrationality of irrational numbers. **ANALYSIS**
- 3) Apply the concept of HCF and LCM in real life problem solving. **APPLICATION**

Placement of Objectives, Instructional Activities and Assessment

KNOWLEDGE	UNDERSTANDING	APPLICATION	ANALYSIS	SYNTHESIS	EVALUATION
S1	S2 , S5	S4	S3		
		B2	B1		
	ACT 1	ACT 2			