

SUBJECT: MATHEMATICS
TOPIC: VECTOR ALGEBRA

LESSON PLAN

Pre-Content/content Post-Content	Learning Outcome/Objectives	
	General	Specific
<u>PRE-CONTENT</u> Definition of vector, types of vectors, position vector of a point, properties of vectors addition, components of a vector, Vector joining two points, section formula. <u>CONTENT</u> Scalar product of two vectors, projection of a vector on a line, cross product of two vectors and their geometrical meaning. Scalar triple product of three vectors its properties and its geometrical interpretation. <u>POST-CONTENT</u> Problem Solving	Students will be able to create real life examples of vector and scalar quantities and understand properties of a vector. appreciate the geometrical Meaning of scalar product and cross product of two vectors. translate the given situation into the corresponding scalar product Problem and evaluate it. calculate faster and will be able to solve problems based on it	Students will be able to analyze and perform simple operations by applying properties of vectors. relate and connect scalar and cross product questions to work done and area of parallelogram/triangle and evaluate them. analyze and apply Scalar triple product to find volume of parallelepiped. acquire problem solving skills and will be able to solve various problems

Home Work /Assignment

- 1)NCERT Exercise questions (Questions from Ex .10.1 to 10.4 and misc. Ex from NCERT book)
- 2)Exemplar problem

MONTH: October/November

CLASS: XII

Teacher's Activity	Student's Activity	Teacher's Observation And Remedial
Teacher will help students in applying the acquired knowledge/rules in performing various operations. . give various examples to calculate scalar and vector product and connect them to real life situations. illustrate geometrically how scalar triple product gives volume of parallelepiped with the help of diagrams. give application-based questions	Students will Solve questions from Ex 10.1 and 10.2 solve Questions from EX10.3 solve Questions from Ex.10.4 And misc. on chap.10 simplify and solve application-based problems	. Teacher will write observation and remarks after the class

Teaching Aids: Smart board,

Methodology/Innovative Methods: Discussion, Recall, Explanation, Question-Answer method, problem solving

Interdisciplinary Links: Applied in Engineering, Science and Economics

Co-Ordinator

Vice-Principal

Principal