GEG 113

Vectors:

- Addition and Subtraction

- Unit vector

- Magnitude

- Bracket Notation

- Direction Ratios

- Direction Cosines

- Magnitude of vector sum

- Magnitude of vector difference

- Laws of vector algebra

- Dot product

- Characteristics of dot product

- Cross Product

- Area of parallelogram

- Applications of

- Vector Equation of a straight line passing through a point an parallel to another vecor

- Parametric equations and Cartesian equations

- Vector equation of a line passing through two points

- Perpendicular distance of a point from a line

- Shortest distance between two skew lines

- Shortest distance between two parallel lines

- Equation of a plane

- Equation of a plane with 3 given points

- Shortest distance between two lines

- Point of intersection between a line and plane

- Perpendicular distance between a point and a plane

- Line of intersection of two planes

- Projection of vectors