



Course Weekly Outline

Week No.	Theoretical
1	Complex Number: Invented number systems, The Argand diagram.
2	Complex Number: Addition, Subtraction, product, Quotient, Power and Roots, Demoivers theorem.
3	Hyperbolic Functions: Definition, Derivatives
4	Hyperbolic Functions: Integrals, Inverse Hyperbolic Functions.
5	Plane Analytic Geometry: Circle, Parabola
6	Plane Analytic Geometry: Ellipse, Hyperbola
7	Volume of Revolution: Disk Method
8	Volume of Revolution: Washer Method
9	Volume of Revolution: Volumes by Cylindrical Shells & solid with known cross sections
10	Methods of Integrations: Integration by substitution
11	Methods of Integrations: Trigonometric Integrals & Quadratic Functions
12	Methods of Integrations: Integration by Parts, Integration by partial fractions
13	Methods of Integrations: Integration of Rational Functions, improper integrals.
14	Matrices and Determinates: Definition, Properties of Matrices, Operations on Matrices
15	Determinants, Matrix Inverse, Solution of Linear Simultaneous Equations (Gramer's Rule).