Department of

Class: B.Com 1st 2nd sem **Subject:** Business Mathematics **Faculty:** Gunjan Kalra

Months	Week 1	Week 2	Week 3	Week 4
March	—	—	—	Chapter 1. Basic Concept of Matrix Algebra of Matrices
April	- Adjoint of a Matrix - Row & Column operations - Inverse Matrix - Solution of linear Eqn	- Inverse Matrix. - Solution of a system of linear Eqn → Unique Solution → Involving not more than three variables.	Unit-II - Differentiation	- Method of Differentiation. Test 1
May	Application of Differentiation. Assignment 1	- Compound Interest and Annuities - Certain different type of Interest rate.	- Concept of present value and amount of Sum Test 2	- Amount of an annuity - Continuous compounding.
June	Ratio, Proportion and Percentage Assignment 2	- Profit and loss	Revision	Revision

Signature:

Date:

Date | Topics

Department of Science

Class: B.Sc 1st year **Subject:** Ordinary Differential Eqn **Faculty:** Gunjan Kaka

Months	Week 1	Week 2	Week 3	Week 4
March	—	—	—	Geometrical meaning of Differential Eqn
April	Exact Differential Equation, Integrating factors.	Lagrange's Equations Chairaut's Equations Singular Solutions.	Orthogonal trajectories in Cartesian coordinate and polar coordinates.	Self orthogonal Homogenous linear Ordinary Diff^n Equation. Test 1
May	Equations Reducible to Homogeneous. Assignment 1	linear Differential Equations of Second order.	Reduction to Normal form. Test 2	Method of Variations of parameters. and undermined coefficients.
June	Ordinary differential Equation and their Solution Assignment 2	– Method of Auxiliary Equations	Revision	Revision

Signature:

Date:

Department of Science

Class: B.Sc 4th Sam **Subject:** Sequence and Series **Faculty:** Gunjan Bajaj

Months	Week 1	Week 2	Week 3	Week 4
March	—	—	—	Boundedness of Set of real Numbers.
April	least upper bound greatest lower bound of a set. Interior Point isolated Point	open sets, closed sets Closure of a set in real numbers and their properties.	Bolzano Weierstrass theorem. -open covers. -compact sets -Heine Borel Theorem — Test 1	Sequence:- Real Sequence and their convergence, Bounded and Monotonic Sequence
May	Cauchy's Sequence Subsequences, Subsequential limits. Assignment 1	Infinite Series. Convergence & Divergence of Infinite Series	Comparison tests of positive terms infinite series	Hyper Harmonic Series or p series. Test 2
June	D' Alembert's Ratio test, Raabe's Test Logarithmic test Assignment 2	Cauchy's Integral test, Cauchy's condensation test	Revision	Revision

Signature:

Date:

Department of Science

Class: B.Sc 3rd year **Subject:** Real & Complex Analysis **Faculty:** Gunjan Kalra

Months	Week 1	Week 2	Week 3	Week 4
March	—	—	—	Jacobians. Beta and Gamma functions.
April	Double and Tiple integrals Dirichlet's integrals,	Change of order of integration in double integrals.	Fourier Series, Properties of Fourier Coefficients Test 1	Dirichlet's conditions. Fourier series for Even and odd functions.
May	Half Range Series change in intervals Assignment-1	Extended Complex Plane. - Continuity and differentiability of complex function	Analytic function Cauchy Riemann Eqn Test 2	Harmonic function Mapping by elementary functions
June	Translation, Rotation Magnification & Inversion.	Mobius transformations Fixed points Cross points, Inverse Points and Critical mappings.	Revision Test	Revision Test

Date: **Signature:** Gunjan Kalra