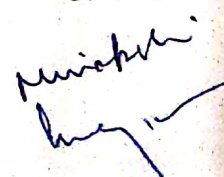


LESSON PLAN (EVEN SEM. 2023-24)

Name of the Assistant/Associate Professor: Mr. Satish, Dr. Anil Kumar, Dr. Minakshi
Class: B.Com 1st Year
Subject: BUSINESS MATHEMATICS

Date	Topic
01.01.2024 to 06.01.2024	Introduction of Syllabus and Scheme of Examination, Matrices: Definition, Types, Algebra
08.01.2024 to 13.01.2024	Determinants: Definition, How to find determinant of matrices of different orders, Adjoint of Matrix
15.01.2024 to 21.01.2024	Elementary row and column operations, Inverse of a matrix, Test
22.01.2024 to 27.01.2024	Differentiation: Using First Principal, General Theorems, Product of two functions, Quotient of two functions
29.01.2024 to 03.02.2024	Chain Rule, Differentiation of Logarithmic, Exponential, Implicit and Parametric Functions
05.02.2024 to 10.02.2024	Derivatives of Higher Order, Application of Derivatives, Test
12.02.2024 to 17.02.2024	Introduction of Simple and Compound Interest, Related Problems, Assignment
19.02.2024 to 24.02.2024	Determination of Compound Interest for various periods: Annually, Half-yearly, Quarterly, Continuous compounding of interest, Test
26.02.2024 to 02.03.2024	Annuities: Definition, Types, Formulas, Related Problems
04.03.2024 to 09.03.2024	Present value of an Annuity for different cases
11.03.2024 to 16.03.2024	Solution of Practical problems related to Annuities, Related Problems
18.03.2024 to 23.03.2024	Ratio: Definition, Related terms, Their Comparison, Types, Test
25.03.2024 to 30.03.2024	Proportion: Definition, Types, Properties, Related Problems
01.04.2024 to 06.04.2024	Addendo Theorem and Related problems, Assignment
08.04.2024 to 13.04.2024	Percentage and Related problems
15.04.2024 to 20.04.2024	Profit and Loss, Related problems
22.04.2024 to 30.04.2024	Revision, Test


Signature



LESSON PLAN (EVEN SEM. 2023-24)

Name of the Associate Professor Mr. Satish Kumar

Class: B.Sc. 3rd Year

Subject: Real & Complex Analysis

Date	Topic
01.01.2024 to 06.01.2024	Jacobians, Beta and Gama functions and their applications.
08.01.2024 to 13.01.2024	Double and Triple integrals
15.01.2024 to 21.01.2024	Dirichlets integrals, change of order of integration in double integrals.
22.01.2024 to 27.01.2024	Fourier's series: Fourier expansion of piecewise monotonic functions.
29.01.2024 to 03.02.2024	Properties of Fourier Coefficients, Dirichlet's conditions.
05.02.2024 to 10.02.2024	Parseval's identity for Fourier series, Fourier series for even and odd functions.
12.02.2024 to 17.02.2024	Half range series, Change of Intervals. Test
19.02.2024 to 24.02.2024	Extended Complex Plane, Stereographic projection of complex numbers.
26.02.2024 to 02.03.2024	Continuity and differentiability of complex functions.
04.03.2024 to 09.03.2024	Analytic functions, Cauchy-Riemann equations. Harmonic functions.
11.03.2024 to 16.03.2024	Mappings by elementary functions: Translation, rotation.
18.03.2024 to 23.03.2024	Magnification and Inversion. Conformal Mappings.
25.03.2024 to 30.03.2024	Mobius transformations & its applications. Test
01.04.2024 to 06.04.2024	Fixed points, Cross ratio, Inverse Points and critical mappings.
08.04.2024 to 13.04.2024	Revision.
15.04.2024 to 20.04.2024	Revision.
22.04.2024 to 30.04.2024	Revision.

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LESSON PLAN (EVEN SEM. 2023-24)

Name of the Associate Professor Mr. Satish Kumar

Class: B.Sc. 1st Year

Subject: Number Theory And Trigonometry

Date	Topic
01.01.2024 to 06.01.2024	Divisibility, G.C.D. (Greatest Common Divisors), L.C.M. (Least Common Multiple).
08.01.2024 to 13.01.2024	Primes, Fundamental Theorem of Arithmetic, Linear Congruences.
15.01.2024 to 21.01.2024	Fermat's theorem. Wilson's theorem and its converse.
22.01.2024 to 27.01.2024	Linear Diophantine equations in two variables.
29.01.2024 to 03.02.2024	Complete Residue System and Reduced Residue System modulo m .
05.02.2024 to 10.02.2024	Euler function. Euler's Generalization of Fermat's theorem.
12.02.2024 to 17.02.2024	Chinese Remainder Theorem. Quadratic Residues.
19.02.2024 to 24.02.2024	Legendre Symbols, Lemma of Gauss: Gauss Reciprocity law.
26.02.2024 to 02.03.2024	Greatest integer function $[x]$. The number of divisors and the sum of divisors of a natural number n .
04.03.2024 to 09.03.2024	The functions $d(n)$ and $a(n)$. Moebius Function and Moebius Inversion Formula.
11.03.2024 to 16.03.2024	De-Moivre's theorem and its applications.
18.03.2024 to 23.03.2024	Expansion of trigonometrical functions. Direct circular and hyperbolic functions and their properties.
25.03.2024 to 30.03.2024	Inverse circular and hyperbolic functions and their properties.
01.04.2024 to 06.04.2024	Logarithm of a complex quantity. Geography's series.
08.04.2024 to 13.04.2024	Summation of Trigonometric series.
15.04.2024 to 20.04.2024	Revision.
22.04.2024 to 30.04.2024	Revision.

LESSON PLAN (EVEN SEM. 2023-24)

Name of the Associate Professor Mr. Satish Kumar

Class: B.Sc. 2nd Year

Subject: Sequence and Series

Date	Topic
01.01.2024 to 06.01.2024	Boundedness of the set of real numbers, least upper bound, greatest lower bound of a set neighbourhoods.
08.01.2024 to 13.01.2024	Interior points isolated points, limit points, open sets, close sets, interior of a set.
15.01.2024 to 21.01.2024	Closure of a set in real numbers and their properties.
22.01.2024 to 27.01.2024	Bolzano-weierstrass theorem. Open cover. Compact sets and Heine Borel Theorem.
29.01.2024 to 03.02.2024	Sequence: real sequence and their convergence, theorems of limits of sequence
05.02.2024 to 10.02.2024	Bounded and monotonic sequence cauchy's sequence.
12.02.2024 to 17.02.2024	Cauchy general principle of convergence, subsequences, limits.
19.02.2024 to 24.02.2024	Infinite Series: covergenc and divergence of infinite series, comparison tests of positive terms infinite series.
26.02.2024 to 02.03.2024	Cauchy's general principle of convergence of series, covergence and divergence of geometrical series. hyper harmonic series or p series.
04.03.2024 to 09.03.2024	Infinite series: D' Alembert Ratio test, logarithm test, De Morgan and Bertrand's Test.
11.03.2024 to 16.03.2024	Cauchy's nth root test, gauss test. Cauchy integral test, Cauchy' condensation test.
18.03.2024 to 23.03.2024	Alternating series: Leibnitz's test absolute and conditional coverageence arbitrary series, Able's Test, Dirichlet's Test, Insert and removal of parenthesis.
25.03.2024 to 30.03.2024	Rearrangement of terms in a series, Dirichlet's theorem, Riemann's Rearrangement theorem .Pringsheim's theorem.
01.04.2024 to 06.04.2024	Multiplication of series.
08.04.2024 to 13.04.2024	Covergenc and absolute covergenc of infinite products.
15.04.2024 to 20.04.2024	Revision.
22.04.2024 to 30.04.2024	Revision.