

LESSON PLAN (EVEN SEM. 2025-26)

Name of the Associate Professor: Mr. Satish Kumar

Class: B.Sc. B.A. 3rd Year

Subject: Real and Complex Analysis

Date	Topic
05.01.2026 to 10.01.2026	Jacobians, Beta and Gamma functions and their applications.
12.01.2026 to 17.01.2026	Double and Triple integrals
19.01.2026 to 24.01.2026	Dirichlet's integrals, change of order of integration in double integrals.
27.01.2026 to 31.02.2026	Fourier's series: Fourier expansion of piecewise monotonic functions.
02.02.2026 to 07.02.2026	Properties of Fourier Coefficients, Dirichlet's conditions
09.02.2026 to 14.02.2026	Parseval's identity for Fourier series, Fourier series for even and odd functions.
16.02.2026 to 21.02.2026	Half range series, Change of Intervals. Test
23.02.2026 to 28.03.2026	Extended Complex Plane, Stereographic projection of complex numbers.
02.03.2026 to 07.03.2026	Continuity and differentiability of complex functions.
09.03.2026 to 14.03.2026	Analytic functions, Cauchy-Riemann equations, Harmonic functions.
16.03.2026 to 21.03.2026	Mappings by elementary functions: Translation, rotation.
23.03.2026 to 28.03.2026	Magnification and Inversion, Conformal Mappings.
30.03.2026 to 04.04.2026	Mobius transformations & its applications. Test
06.04.2026 to 11.04.2026	Fixed points, Cross ratio, Inverse Points and critical mappings.
13.04.2026 to 18.04.2026	Revision, Sessional Exam
20.04.2026 to 25.04.2026	Revision.
27.04.2026 to 02.05.2026	Revision.

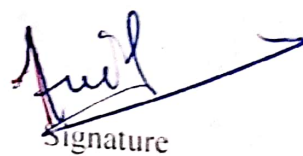

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LESSON PLAN (EVEN SEM. 2025-26)

Teacher- Dr. Anil Kumar, Associate Professor, Mathematics

Subject- Mathematics, Class- B.Sc./B.A. 6th Semester, Paper – Linear Algebra

Sr. No.	Date/Period	Topics
1.	05.01.2026 to 10.01.2026	Vector Spaces, Subspaces, Linear Sum and Direct Sum of Subspaces
2.	12.01.2026 to 17.01.2026	Linear Span, Linearly Independent and Dependent Subset of a Vector Space
3.	19.01.2026 to 24.01.2026	Finitely Generated Vector Space, Existence Theorem for Basis of a Finitely Generated Vector Space, Finite Dimensional Vector Spaces
4.	27.01.2026 to 31.02.2026	Invariance of the Number of Elements of Basis Sets, Dimensions, Identical Spaces, Quotient Space and its Dimension, Assignment I
5.	02.02.2026 to 07.02.2026	Homomorphism and Isomorphism of Vector Spaces, Linear Transformation and Linear Forms on Vector Spaces
6.	09.02.2026 to 14.02.2026	Vector Space of all the Linear Transformations, Dual Spaces, Bidual Spaces, Annihilator of Subspaces of Finite Dimensional Vector Spaces
7.	16.02.2026 to 21.02.2026	Null Space, Range Space of a Linear Transformation, Rank and Nullity Theorem
8.	23.02.2026 to 28.03.2026	Algebra of Linear Transformation, Minimal Polynomial of a Linear Transformation
9.	02.03.2026 to 07.03.2026	Singular and Non-Singular Linear Transformations, Matrix of a Linear Transformation
10.	09.03.2026 to 14.03.2026	Change of Basis, Eigen Values and Eigen Vectors of Linear Transformations
11.	16.03.2026 to 21.03.2026	Inner Product Spaces, Cauchy – Schwarz Inequality, Assignment II
12.	23.03.2026 to 28.03.2026	Orthogonal Vectors, Orthogonal Complement, Orthogonal Sets and Basis
13.	30.03.2026 to 04.04.2026	Bessel's Inequality for Finite Dimensional Vector Spaces, Gram-Schmidt Orthogonalization Process
14.	06.04.2026 to 11.04.2026	Adjoint of a Linear Transformation and its Properties, Unitary Linear Transformation
15.	13.04.2026 to 18.04.2026	Sessional Exam, Revision of Syllabus
16.	20.04.2026 to 25.04.2026	Revision of Syllabus
17.	27.04.2026 to 02.05.2026	Revision of Syllabus


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LESSON PLAN (EVEN SEM. 2025-26)

Name of the Assistant Professor: Dr. Minakshi

Class: B.Sc. 3rd Year

Subject: Dynamics

Date	Topic
05.01.2026 to 10.01.2026	Preliminaries related to Motion of a Particle, Velocity, Acceleration, Angular Velocity, Angular Acceleration, Relation between Linear and Angular Velocity
12.01.2026 to 17.01.2026	Radial and Transverse Velocity, Radial and Transverse Acceleration, Related Problems
19.01.2026 to 24.01.2026	Tangential and Normal Components of Velocity and Acceleration of a Particle, Related Problems
27.01.2026 to 31.02.2026	Simple Harmonic Motion, Related Problems, Test
02.02.2026 to 07.02.2026	Elastic Strings: Hooke's Law, Theorems and Related Problems
09.02.2026 to 14.02.2026	Newton's Laws of Motion: Equations of Motion, Motion of a body on a Horizontal Plane
16.02.2026 to 21.02.2026	Vertically Upward and Downward Motion, Test, Assignment
23.02.2026 to 28.03.2026	Motion of two bodies connected by a String, Motion on a smooth and rough horizontal plane, Atwood's Machine, Related Problems
02.03.2026 to 07.03.2026	Work: Definition, Units, Related Problems
09.03.2026 to 14.03.2026	Power, Related Problems, Test
16.03.2026 to 21.03.2026	Energy, Principle of Work and Energy, Related Problems
23.03.2026 to 28.03.2026	Motion of a Particle on a smooth curve in a vertical plane, Inside and Outside of a vertical circle, Cycloidal Motion
30.03.2026 to 04.04.2026	Motion of a Projectile, Related Terms and Problems
06.04.2026 to 11.04.2026	Central Force and Central Orbit, Related Theorems and Expressions, Areal Velocity, APSE and Apsidal Distances, Velocity from Infinity
13.04.2026 to 18.04.2026	Kepler's Law of Planetary Motion, Motion under different conditions, Related Problems, Sessional Exam
20.04.2026 to 25.04.2026	Motion of a Particle in three dimensions in Spherical and Cylindrical Polar Coordinates, Related Problems
27.04.2026 to 02.05.2026	Revision

Minakshi
Signature

LESSON PLAN (EVEN SEM. 2025-26)

Name of the Associate Professor: Mr. Satish Kumar

Class: B.A. 2nd Year Major

Subject: Real Analysis

Sr. No.	Date/Period	Topics
1.	05.01.2026 to 10.01.2026	Finite and infinite sets.
2.	12.01.2026 to 17.01.2026	Countable and uncountable sets.
3.	19.01.2026 to 24.01.2026	Bounded sets.
4.	27.01.2026 to 31.02.2026	Suprema and Infima.
5.	02.02.2026 to 07.02.2026	Completeness of real.
6.	09.02.2026 to 14.02.2026	Archimedean property of real with examples.
7.	16.02.2026 to 21.02.2026	Definition of Riemann integral with example. Integrability of continuous and monotonic functions.
8.	23.02.2026 to 28.03.2026	Fundamental theorem of integral calculus. Meanvalue theorems of integral calculus.
9.	02.03.2026 to 07.03.2026	Improper integrals and their convergence. Comparison test. Abel's test.
10.	09.03.2026 to 14.03.2026	Dirichlet's test. Frullani's integral and examples.
11.	16.03.2026 to 21.03.2026	Integral as a function of a parameter. Continuity.
12.	23.03.2026 to 28.03.2026	Differentiability and integrability of an integral function of a parameter.
13.	30.03.2026 to 04.04.2026	Jacobians. Beta and gamma functions.
14.	06.04.2026 to 11.04.2026	Double integral, triple integral Dirichlet's integrals.
15.	13.04.2026 to 18.04.2026	Change of order of integration in double integral.
16.	20.04.2026 to 25.04.2026	Revision
17.	27.04.2026 to 02.05.2026	Test


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LESSON PLAN (EVEN SEM. 2025-26)

Name of the Assistant/Associate Professor: Dr. Anil Kumar, Dr. Minakshi

Class: B.A. 2nd Year Minor

Subject: Mathematical Computing using Python

Sr. No.	Date/Period	Topics
1.	05.01.2026 to 10.01.2026	Python Basics: Introduction, Thrust Area of Python, Installing Anaconda Python Distribution
2.	12.01.2026 to 17.01.2026	Installing PyCharm, Getting Started with Python, Python as A Calculator, Installing and using Jupyter Notebook
3.	19.01.2026 to 24.01.2026	Identifiers, Keywords, Statement and Expressions, Variables, Mathematical Operators, Precedence and Associativity
4.	27.01.2026 to 31.02.2026	Data types, Comments, Reading Input, Print Output, Type Conversions, The Type() Function and Operator
5.	02.02.2026 to 07.02.2026	Control Flow Statements: The if, if...else, if...elif...else Decision Control Flow Statement, Nested if Statements
6.	09.02.2026 to 14.02.2026	The while Loop, The for Loop, the continue and break Statements, Catching Exceptions using try and except Statement
7.	16.02.2026 to 21.02.2026	Mathematical Function: Built-In Functions, commonly used Mathematical Modules
8.	23.02.2026 to 28.03.2026	Mathematical Function Definition and Calling the Function, The return Statement and void Function
9.	02.03.2026 to 07.03.2026	Scope and Lifetime of Variables, Default Parameters
10.	09.03.2026 to 14.03.2026	Strings: Creating and Storing strings, Basic String Operations
11.	16.03.2026 to 21.03.2026	Accessing Characters in String by Index Number
12.	23.03.2026 to 28.03.2026	String Slicing and Joining, String Methods, Formatting Strings
13.	30.03.2026 to 04.04.2026	Lists: Creating List, Basic List Operations, Indexing and Slicing in Lists
14.	06.04.2026 to 11.04.2026	Built-In Functions Used in Lists
15.	13.04.2026 to 18.04.2026	List Methods, The del Statement
16.	20.04.2026 to 25.04.2026	Basic Matrix Computations using Python Programming, Sessional Exam
17.	27.04.2026 to 02.05.2026	Revision

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