

Lesson Plan
Session: 2025-26

Name of the Assistant Professor: Bharat Kumar

Class: B.A./B.Sc. 1st semester

Subject: Mathematics

Paper: Introductory Mathematics-1

Paper Code: - CDLU/MDC/MAT/1/101

| Dates | Week | Topic |
|--------------------------------|------|---|
| 24/07/2025 to 26/07/2025 | 1 | Unit 1:- Sets and their representations, Empty set, Finite and infinite sets, Subsets, |
| 28/07/2025 to 02/08/2025 | 2 | Equal sets, Power sets, Universal set, Union and intersection of sets, |
| 04/08/2025 to 09/08/2025 | 3 | Difference of two sets, Complement of a set, |
| 11/08/2025 to 16/08/2025 | 4 | Venn diagram, De-Morgan's laws and their applications. An introduction to matrices and their types, |
| 18/08/2025 to 23/08/2025 | 5 | Operations on matrices, Symmetric and skew-symmetric matrices, Minors, Co-factors. |
| 25/08/2025 to 30/08/2025 | 6 | Determinant of a square matrix, Adjoint and inverse of a square matrix, |
| 01/09/2025 to 06/09/2025 | 7 | UNIT 2:- Complex numbers, Operations on complex numbers, |
| 08/09/2025 to 13/09/2025 | 8 | Modulus and argument of a complex number. Linear inequalities, |
| 15/09/2025 to 20/09/2025 | 9 | Algebraic solutions of linear inequalities in two variables and their graphical representation Arithmetic progression |
| 22/09/2025 to 27/09/2025 | 10 | , Geometric progression, Harmonic progression, Arithmetic mean (A.M.), Geometric mean (G.M.), |
| 29/09/2025 to 04/10/2025 | 11 | Harmonic mean (H.M.), Relation between A.M., G.M. and H.M. |
| 06/10/2025 to 11/10/2025 | 12 | Unit 3:- Straight lines: Slope of a line and angle between two lines, |

| | | |
|--------------------------------|----|--|
| 13/10/2025 to 18/10/2025 | 13 | MID TERM EXAM |
| 27/10/2025 to 01/11/2025 | 14 | Different forms of equation of a line: Parallel to co-ordinate axes, Point-slope form, |
| 03/11/2025 to 08/11/2025 | 15 | Slope-intercept form, Two-point form, |
| 10/11/2025 to 15/11/2025 | 16 | General form; Distance of a point from a straight line. |
| 17/11/2025 to 24/11/2025 | 17 | Test |

B. Prasad Kumar

Signature

Lesson Plan
Session: 2025-26

Name of the Assistant Professor: Bharat Kumar

Class: B.A./B.Sc. 1st semester

Subject: Mathematics

Paper: Computer Skills

Paper Code: - CDLU/SEC/MAT/1/101

| Dates | Week | Topic |
|--------------------------------|------|--|
| 24/07/2025 to 26/07/2025 | 1 | Unit 1:- Windows: Installation of Windows, Windows Desktop, My computer, My documents, Network neighbourhood, Recycle Bin, |
| 28/07/2025 to 02/08/2025 | 2 | Quick launch tool bar, System tray, Start menu, Task bar - System Tray - |
| 04/08/2025 to 09/08/2025 | 3 | Quick launch tool bar - Start button - Parts of Windows, Keyboard Accelerators |
| 11/08/2025 to 16/08/2025 | 4 | Key board short keys or hotkeys, Working with Notepad |
| 18/08/2025 to 23/08/2025 | 5 | WordPad, Creating & Editing Images with Microsoft paint |
| 25/08/2025 to 30/08/2025 | 6 | using the Calculator, Personalising Windows |
| 01/09/2025 to 06/09/2025 | 7 | UNIT 2:- MS-Word: Working with Documents, formatting page & setting Margins, converting files to different formats, Importing & Exporting documents |
| 08/09/2025 to 13/09/2025 | 8 | Formatting Documents - Setting Font styles, Font selection- style, Setting Paragraph style, Alignments, Indents, Line Space, Margins, Bullets& Numbering |
| 15/09/2025 to 20/09/2025 | 9 | Setting Page style - Formatting Page, Page tab, Margins, Layout settings, Border & Shading, Columns, Header & footer, Setting Footnotes & end notes, |
| 22/09/2025 to 27/09/2025 | 10 | page break, Setting Document styles, Table of Contents, Index, Page Numbering, date & Time |
| 29/09/2025 to 04/10/2025 | 11 | Creating Tables- Table settings, Borders, Alignments, Insertion, deletion, Merging, Splitting, Sorting, Drawing - Inserting Clip Arts, Pictures/Files, Tools -Spell Checks, Mail merge, Templates, Printing Documents. |
| 06/10/2025 to 11/10/2025 | 12 | Unit 3:- MS-Excel: Spread Sheet & its Applications, Opening Spreadsheet, Menus, working with Spreadsheets- opening, saving files, |

| | | |
|---|-----------|---|
| 13/10/2025 to 18/10/2025 | 13 | MID TERM EXAM |
| 27/10/2025 to 01/11/2025 | 14 | Setting Margins, spread sheet addressing - Rows, Columns & Cells, Referring Cells & Selecting Cells – Shortcut Keys. Entering & Deleting Data, Inserting Data, Insert Cells, Column, rows & sheets, |
| 03/11/2025 to 08/11/2025 | 15 | Inserting Functions, Formula finding total in a column or row, Mathematical operations (Addition, Subtraction, Multiplication, Division, Exponentiation) |
| 10/11/2025 to 15/11/2025 | 16 | Formatting Spreadsheets- Labelling columns & rows, Formatting- Cell, row, column & Sheet, Category |
| 17/11/2025 to 24/11/2025 | 17 | Alignment, Font, Border & Shading, Hiding/ Locking Cells, working with sheets – Sorting, Filtering, Creating Charts, Tools – Error checking, Spell Checks. |

B. K. Kumar

Signature

Lesson Plan
Session: 2025-26

Name of the Assistant Professor: Bharat Kumar

Class: B.A./B.Sc. 5th Semester

Subject: Mathematics

Paper: Real Analysis

| Dates | Week | Topic |
|--------------------------------|------|--|
| 24/07/2025 to 26/07/2025 | 1 | Boundedness of a set, topology of real numbers, partition, upper and lower sums. |
| 28/07/2025 to 02/08/2025 | 2 | Theorems, examples and questions of exercise 1.1, 1.2 & 1.3 of Riemann integral. |
| 04/08/2025 to 09/08/2025 | 3 | Chapter 2- Improper integrals and their convergence |
| 11/08/2025 to 16/08/2025 | 4 | Doubt discussion and test of Riemann integral |
| 18/08/2025 to 23/08/2025 | 5 | Chapter 3- Integral as a function of a parameter |
| 25/08/2025 to 30/08/2025 | 6 | Doubt discussion and test of chapter 2nd, 3rd. |
| 01/09/2025 to 06/09/2025 | 7 | Chapter 4- Definition and examples of metric spaces. |
| 08/09/2025 to 13/09/2025 | 8 | Chapter 5- Neighborhoods, limit points, interior points, |
| 15/09/2025 to 20/09/2025 | 9 | Open and closed sets, closer and interior, boundary points. |
| 22/09/2025 to 27/09/2025 | 10 | Doubt discussion of chapter 4 and 5, |
| 29/09/2025 to 04/10/2025 | 11 | Chapter 6- Cantor's intersection theorem, baire's category theorem, contraction principle. |

| | | |
|--------------------------------|----|---|
| 06/10/2025 to 11/10/2025 | 12 | Chapter 7- Continuous functions, uniform continuity in metric spaces. |
| 13/10/2025 to 18/10/2025 | 13 | MID TERM EXAM |
| 27/10/2025 to 01/11/2025 | 14 | Chapter 8- Sequential compactness, bolzanoweierstrass property, total boundness. Doubt discussion of chapter 6 and 7. |
| 03/11/2025 to 08/11/2025 | 15 | Chapter 9- Finite intersection property, continuity in relation with compactness, connectedness, components, |
| 10/11/2025 to 15/11/2025 | 16 | continuity in relation with connectedness |
| 17/11/2025 to 24/11/2025 | 17 | Revision of chapter 8 th , 9 th Practice of All chapters |

*Bharat
Kumar*

Signature