

Curriculum Delivery
Four-Year Undergraduate Program (FYUP)
Mathematics
Session: 2025-2026

B.Sc. Other than Mathematics (Multidisciplinary Course)

SEMESTER-II

Course Code: MATH-MD-T-02

Course title: Basic Mathematics

Session: 2025-2026

<u>Semester – I</u>			
Name of the teacher	Unit	Subject	Classes
Md. MeezanurRa haman	1	<ul style="list-style-type: none"> • Introduction and definition of equation. Types of equations. • Relation between roots and coefficients. Descartes’s rule of signs. • Linear and quadratic equations and their solution. Nature of the roots of quadratic equations. 	25
	2 & 3	<ul style="list-style-type: none"> • Polar representation of complex numbers. • De Moivre’s theorem (without proof) for rational indices and their applications. • Introduction and definition of equation. Types of equations. • Relation between roots and coefficients. Descartes’s rule of signs. • Linear and quadratic equations and their solution. Nature of the roots of quadratic equations. 	
Dr. Sarifuddin	1	<ul style="list-style-type: none"> • Introduction to sets and their representations. The empty set, finite and infinite sets, equal sets, subsets, power set, and Universal set. • Venn Diagrams, operations on sets, complement of a set, problems on union and intersection of sets. 	20
	6	<ul style="list-style-type: none"> • Measures of Central Tendency: mean, weighted mean, median, mode. 	

		<ul style="list-style-type: none"> Measures of Dispersion: range, mean deviation, standard deviation, coefficient of variation, moments, skewness and kurtosis. 	
Babulal Tudu	5	<ul style="list-style-type: none"> Definition and scope of statistics, concepts of statistical population and sample. Data: qualitative and quantitative, discrete and continuous data types, primary and secondary data. Presentation of data: tabular and graphical. Frequency distribution, cumulative frequency distribution and their graphical representations: histogram, frequency polygon, frequency curve, and O-gives. 	20
	4	<ul style="list-style-type: none"> Definition of a Matrix. Types of Matrices. Elementary operations on Matrices. Determinant of a square matrix (up to third order). Properties of determinants. Cofactors and minor of a determinant. Transpose and Adjoint of a matrix. Symmetric and Skew Symmetric Matrices. Inverse of a matrix. Solution of system of linear equations (up to third order) using matrix inversion method and Cramer's Rule. 	