

Teaching Plan for the Academic Session 2025-2026

Name of the Teacher: Ankita Bharali

Department of Mathematics, J.B. College (Autonomous)

Class/ Semester	Code & Title of the Paper Allotted (Credit)	Method of Teaching	Teaching Material	Unit	Topics	Period/ Hours Required	Remarks / Books
UG 1st Sem	DTNVA-011: Digital Technology and Numerical Literacy (2)	Lecture, Discussion	Chalk & Talk, Notes	III, IV	Number System & Properties, Some applications of basic Mathematics	14	Numerical System Book: Bhowal & Baruah
UG 2nd Sem	DTNVA-021: Digital Technology and Numerical Literacy (2)	Lecture, Discussion	Chalk & Talk, Notes	III, IV	Number System & Properties, Some applications of basic Mathematics	14	Applications of Basic Mathematics Book: Bhowal & Baruah
UG 3rd Sem	MTHMI-031: Discrete Mathematics (4)	Lecture, Discussions	Chalk & Talk, Problem Solving, Textbooks	I, II	Recurrence relations, Lattice	40	Discrete Mathematics Concepts Book: N. Chandrasekaran & M. Umaparvathi
UG 4th Sem	MTHMJ-042: Numerical Analysis (4)	Lecture, Lab	Software Tools, PDF notes, PPT, Textbooks	I, II, III, IV&V	Numerical Methods	55+20	Numerical Methods Book: Jain <i>et al.</i> , R. Pratap, Getting Started with Matlab
UG 5th Sem	MTHMJ-054: Linear Programming (4)	Lecture, Discussion	Board, Exercises, Notes, Books	I, II	Linear Programming problem	37	Simplex Method, Applications Book: G. Hadley, J. K. Sharma, P. M. Karak

UG 6th Sem	MTHMJ-064: Mathematical Methods (4)	Lecture	Board, Notes, Textbooks	I, II&II I	Fourier Series, Laplace Transforms, Inverse Laplace Transforms	40	Mathematical Methods Book: S. Sreenadh, S. Ranganatham, M. R. Spiegel
PG 1st Sem	PMTHC-101: Differential equations (4)	Lecture, Discussion	Chalk & Talk, Notes, Problem Solving	III, V	BVP, Second order linear PDE	36	PDEs Book: S.L. Ross, I. N. Sneddon
PG 1st Sem	PMTHC-103: Real Analysis & Lebesgue Measure (4)	Lecture, Discussion	Chalk & Talk, Textbooks, Exercises, Notes	I, II	Uniform Convergence, Vector valued functions, R-S integral	36	Real Analysis Book: W. Rudin, T.M. Apostol, Malik and Arora
PG 2nd Sem	PMTHD-201(A): Fuzzy Sets & Systems (4)	Lecture, Discussion	Chalk & Talk, Problem Solving	I, II	Fuzzy Sets, Fuzzy relation & Fuzzy Graphs	36	Fuzzy set theory Book: Klir & Yuan, H. J. Zimmermann,
PG 3rd Sem	PMTHC-303: Numerical Analysis (4)	Lecture, Discussion	Board, Exercises, Notes	I, II	Direct and Iterative methods	36	Numerical Analysis Book: Gerald & Wheatley, Jain <i>et al.</i>
PG 4th Sem	PMTHC-403: Mathematical Methods (4)	Lecture, Discussion	Chalk & Talk, Notes, Problem Solving	I, III	Calculus of variations, Non-linear Programming Problem	36	CoV Book: A.S. Gupta, NLPP Book: Swarup <i>et al.</i>