

Teaching Plan for the Academic Session 2025-2026

Name of the Teacher: Dr. Rinku Dey

Department of Mathematics, JAGANNATH BAROOAH UNIVERSITY

Class/ Semester	Code&Title of the Paper Allotted (Credit)	Method of Teaching	Teaching Material	Unit	Topics	Period/ Hours Required	Remarks / Books
UG 3rd Sem	MTHMJ-033: Group Theory- I (4)	Lecture, Discussions	Chalk & Talk, Problem Solving, Textbooks	I, IV	Group, Types of groups and Cosets.	30	A Course in Abstract Algebra: V.K. Khanna & S.K. Bhambri.
UG 4th Sem	MTHMJ- 044:Ring Theory and Linear Algebra-I (4)	Lecture Discussion	Chalk & Talk, Problem Solving, Textbooks	I, II	Ring and Ideal of a ring	30	A First Course in Abstract Algebra : J.B. Fraleigh
UG 5 th Sem	MTHMJ-052: Group Theory – II (4)	Lecture, Discussion	Board, Exercises, Notes, Books	II, IV	Group homomorphisms and Group Actions	32	Simplex Method, Applications Book: G. Hadley, J. K. Sharma, P. M. Karak
UG 5th Sem	MTHMI- 051:Linear Programming (4)	Lecture, Discussion	Board, Chalk and Books	II, III	Simplex Method, Charnes' M- technique, two phase method and Matrix Inversion Methods	30	Simplex Method, Applications Book: G. Hadley, J. K. Sharma, P. M. Karak
UG 6th Sem	MTHMJ-062: Ring Theory and Linear Algebra - II (4)	Lecture, Discussion	Board, Notes, Textbooks	I, II	Ring Homomorphisms, Isomorphisms and Polynomial Rings	45	Modern Algebra: S. Singh and Q. Zamiruddin
PG 1st Sem	PMTHC-103: Real Analysis & Lebesgue Measure (4)	Lecture, Discussion	Chalk & Talk, Textbooks,	III, IV	Lebesgue outer measure and	36	Lebesgue Measure and Integration: P. K. Jain and V. P.

			Exercises, Notes		Lebesgue Integral		Gupta: New Age International Publishers.
PG 2 nd Sem	PMTHC-202: Topology(4)	Lecture, Discussion	Chalk & Talk, Problem Solving	I, II	Topological Spaces, Separation Axioms, Compactness, Connected Spaces and Product Topological Spaces	60	Topology: J. R. Munkres: Afirst course, Prentice Hall of India.
PG 3rd Sem	PMTHC-302: Functional Analysis (4)	Lecture, Discussion	Board, Exercises, Notes	I, II,III, IV	Normed Linear Space, Banach Space and Quotient Space	60	Functional Analysis: A. R. Vasishtha and J. N.Sharma,:Krish na Prakashan, Meerut
PG 4th Sem	PMTHC-401: Graph Theory (4)	Lecture, Discussion	Chalk & Talk, Notes, Problem Solving	I, II	Graph, Connected Graph, Tree, Eulerian Graph, Hamiltonian Graph	36	Graph Thery: F. Harary, Narosa Publishing House, New Delhi.