

Baba fateh Singh ji Govt. College, Assandh, Karnal

Department of MATHEMATICS

Class B.A. I (Sem-II)

Lesson Plan Algebra and Number Theory

Sr.No	from		
1	10-02-2025 Week 1	→ Symmetric Matrices,	
2		→ skew symmetric Matrices	
3		15-02-2025	→ Hermition Matrices.
4			→ Skew - Hermition Matrices.
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7	17/02/2025 Week 2	→ Practical Work.	
8		→ Orthogonal Matrix.	
9		22/02/2025	→ Unitary Matrix
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11	24/02/2025 Week 3	→ Rank of a Matrix.	
12		— do —	
13		01/03/2025	→ Practical Work.
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15	03/03/2025 Week-4	→ Elementary operations on Matrices.	
16		→ Equivalent Matrices.	
17		09/03/2025	→ Practical Work.
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19	17/03/2025 Week-5	→ Column Echelon Matrix.	
20		→ Some theorems on Characteristic Roots and characteristic Vector.	
21		22/03/2025	→ Cayley-Hamilton theorem.
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23	24/03/2025 Week-6	→ Minimal Polynomial and Minimal eq <sup>n</sup> of Matrix.	
24		→ Practical Work.	
25		→ General Equation	
26		→ Synthetic division.	
27	29/03/2025	→ Fundamental theorem of Algebra	
28		→ Practical Work,	
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33		→ Fundamental theorem of Algebra	
34		→ Practical Work,	
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43	Week 7	31/03/2025	→ Factor theorem.
44			→ Relation between roots and the
45	Week 8	05/04/2025	→ Transformation in general.
46			→ Descartes's rule of signs.
47	Week 9	07/04/2025	→ Practical Work.
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49	Week 10	12/04/2025	→ Cardon Method
50			→ Descartes's Solution of the biquadratic
51	Week 11	14/04/2025	→ Ferrari's Method
52			→ Practical Work.
53	Week 12	19/04/2025	→ Divisibility and its theorems.
54			→ Division algorithm
55	Week 13	21/04/2025	→ fundamental theorem of Arithmetic
56			→ Standard form of conical form
57	Week 14	26/04/2025	→ Practical Work.
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59	Week 15	28/04/2025	→ congruences.
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61	Week 16	03/05/2025	→ Linear congruence
62			→ Linear diophantine Equations.
63	Week 17	05/05/2025	— do —
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65	Week 18	10/05/2025	Practical work.
66			→ Fermat's theorem.
67	Week 19	12/05/2025	
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69	Week 20	17/05/2025	
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91	19/05/2025 Week-14	→ Euler's theorem (functions) → complete Residue System (Modm) → Wilson's theorem and its converse
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96	24/05/2025	
97	26/05/2025 Week-15 31/05/2025	→ chinese Remainder theorem → Practice Work.
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102	Week-16	
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