



Aggarwal College Ballabgarh

LESSON PLAN 17 WEEKS (JAN-APRIL)-2025

Name of Faculty: _____ Neha Goel _____
Designation/ Department: Assistant Professor (Mathematics)

CLASS: Msc Mathematics	SEMESTER: 2nd	SECTION: A
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SUBJECT: Algebraic Number theory

Week		
1	7-1-2025
	8-1-2025
	9-1-2025	Introduction and Definition of Algebraic number and Integers
	10-1-2025	Related theorem
	11-1-2025	Contd..
	12-1-2025	S. U. N. D. A. Y.
2	13-1-2025	.....
	14-1-2025	.....
	15-1-2025	Gaussian Integers and its properties
	16-1-2025	Related theorems
	17-1-2025	Primes in ring of Gaussian Integers
	18-1-2025	Contd..
	19-1-2025	S. U. N. D. A. Y.
3	20-1-2025	.....
	21-1-2025	.....
	22-1-2025	Fundamental Theorem in ring of Gaussian Integer

	23-1-2025	Integers and Fundamental Theorem in $\mathbb{Q}(w)$
	24-1-2025	Related theorems
	25-1-2025	Algebraic Fields
	26-1-2025	REPUBLIC DAY /S. U. N. D. A. Y.
4	27-1-2025	.....
	28-1-2025	.....
	29-1-2025	Primitive Polynomials and Related Theorems
	30-1-2025	Contd..
	31-1-2025	General Quadratic Field $\mathbb{Q}(\sqrt{m})$
	1-2-2025	Units of $\mathbb{Q}(\sqrt{2})$
	2-2-2025	S. U. N. D. A. Y/BASANT PANCHAMI
5	3-2-2025	.....
	4-2-2025	.....
	5-2-2025	Fields in which Fundamental theorem is false
	6-2-2025	Real and Complex Euclidean Fields
	7-2-2025	Fermat Theorem in ring of Gaussian Integers
	8-2-2025	Primes of $\mathbb{Q}(\sqrt{2})$ and $\mathbb{Q}(\sqrt{5})$
	9-2-2025	S. U. N. D. A. Y
6	10-2-2025	.....
	11-2-2025	.....
	12-2-2025	HOLIDAY: GURU RAVIDAS JAYANTI
	13-2-2025	Countability of set of Algebraic numbers
	14-2-2025	Liouville Theorem and Generalization
	15-2-2025	Class test

	16-2-2025	S. U. N. D. A. Y.
7	17-2-2025	.....
	18-2-2025	.....
	19-2-2025	Transcendental Numbers and Theorems
	20-2-2025	Algebraic Number fields
	21-2-2025	Related theorem
	22-2-2025	Lioville theorem of primitive elements
	23-2-2025	S. U. N. D. A. Y.
8	24-2-2025	.....
	25-2-2025	.....
	26-2-2025	HOLIDAY: MAHA SHIVRATRI
	27-2-2025	Ring of Algebraic Integers and Theorem of primitive elements
	28-2-2025	Norm and Trace of Algebraic numbers
	1-3-2025	Related Theorems
	2-3-2025	S. U. N. D. A. Y.
9	3-3-2025	.....
	4-3-2025	.....
	5-3-2025	Non Degeneracy of bilinear pairing and Theorems
	6-3-2025	Existence of integral basis and Applications
	7-3-2025	Discriminant of an Algebraic number field
	8-3-2025	Examples
	9-3-2025	S. U. N. D. A. Y.
10	10-3-2025	HOLI BREAK
	11-3-2025	HOLI BREAK

	12-3-2025	HOLI BREAK
	13-3-2025	HOLI BREAK
	14-3-2025	HOLI BREAK
	15-3-2025	HOLI BREAK
	16-03-2025	S. U. N. D. A. Y.
11	17-3-2025	.....
	18-3-2025	.....
	19-3-2025	Ideals in the ring of Algebraic integers
	20-3-2025	Calculation of Quadratic and cubic basis
	21-3-2025	Explicit Construction of integral basis
	22-3-2025	Sign of Discriminant and theorems
	23-3-2025	S. U. N. D. A. Y.
12	24-3-2025	.....
	25-3-2025	.....
	26-3-2025	Cyclotomic Field
	27-3-2025	Related theorems
	28-3-2025	Integral closure
	29-3-2025	Related theorems
	30-3-2025	S. U. N. D. A. Y.
13	31-3-2025	HOLIDAY: ID-UL-FITR
	1-4-2025	.....
	2-4-2025	Doubt class
	3-4-2025	Assignment
	4-4-2025	Class test

	5-4-2025	Noetherian ring and Theorems
	6-4-2025	S. U. N. D. A. Y.
14	7-4-2025	.....
	8-4-2025	.....
	9-4-2025	Characterizing Dedekind Domains
	10-4-2025	HOLIDAY: MAHAVIR JAYANTI
	11-4-2025	Contd..
	12-4-2025	Fractional Ideals and unique Factorization
	13-4-2025	S. U. N. D. A. Y.
15	14-4-2025	HOLIDAY: AMBEDKAR JAYANTI
	15-4-2025	.....
	16-4-2025	Related questions
	17-4-2025	Group Discussion
	18-4-2025	GCD and LCM of ideals
	19-4-2025	Chineses Remainder theorem
	20-4-2025	S. U. N. D. A. Y.
16	21-4-2025	.....
	22-4-2025	.....
	23-4-2025	Dedkind theorem
	24-4-2025	Ramifield and Unremifield Extensions
	25-4-2025	Related theorems
	26-4-2025	Assignment
	27-4-2025	S. U. N. D. A. Y.
	28-4-2025	.....

17	29-4-2025	.....
	30-4-2025	HOLIDAY: AKSHAY TRITYA
	01-05-2025	Revision of important theorems
	02-05-2025	Discussion of previous year question papers
	03-05-2025	Discussion of previous year question papers
	04-05-2025	S. U. N. D. A. Y.

Signature