



**Aggarwal College Ballabgarh**

**LESSON PLAN**  
**18 WEEKS (JULY-NOV)-2024**

**Name of Faculty: \_\_\_Dr. K.L. Kaushik\_\_\_**  
**Designation/ Department: \_Associate Professor in Mathematics**

<b>CLASS: B.SC (Physical Science)</b>	<b>SEMESTER: First</b>	<b>SECTION:</b>
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**SUBJECT: Function and Algebra**

<b>WEEK</b>	<b>DATE</b>	<b>TOPIC TO BE COVERED</b>
<b>1</b>	<b>1-08-2024</b>	-----
	<b>2-08-2024</b>	Relation: Definition and basic concepts
	<b>3-08-2024</b>	-----
	<b>4-08-2024</b>	<b>S. U. N. D. A. Y.</b>
	<b>5-08-2024</b>	Examples related to the topic
	<b>6-08-2024</b>	Functions along with domain
	<b>7-08-2024</b>	<b>H.O.L.I. D. A. Y.</b>
<b>2</b>	<b>8-08-2024</b>	-----
	<b>9-08-2024</b>	Functions along with Range
	<b>10-08-2024</b>	-----
	<b>11-08-2024</b>	<b>S. U. N. D. A. Y.</b>
	<b>12-08-2024</b>	Composition of functions
	<b>13-08-2024</b>	Contd....
	<b>14-08-2024</b>	-----
<b>3</b>	<b>15-08-2024</b>	<b>H.O.L.I. D. A. Y.</b>
	<b>16-08-2024</b>	Invertibility and inverse of functions

	17-08-2024	-----
	18-08-2024	<b>S. U. N. D. A. Y.</b>
	19-08-2024	<b>H.O.L.I. D. A. Y.</b>
	20-08-2024	Continue the same topic
	21-08-2024	-----
4	22-08-2024	-----
	23-08-2024	One-to-one correspondence
	24-08-2024	-----
	25-08-2024	<b>S. U. N. D. A. Y.</b>
	26-08-2024	<b>HOLIDAY</b>
	27-08-2024	Cardinality of a set
	28-08-2024	-----
5	29-08-2024	-----
	30-08-2024	Doubts related to the topic
	31-08-2024	-----
	1-09-2024	<b>S. U. N. D. A. Y.</b>
	2-09-2024	Revision test
	3-09-2024	Relation b/w the roots and coefficients of polynomial in one variable
	4-09-2024	-----
6	5-09-2024	-----
	6-09-2024	Contd..
	7-09-2024	-----
	8-09-2024	<b>S. U. N. D. A. Y.</b>

	9-09-2024	Solutions of polynomial equations having conditions on roots
	10-09-2024	Contd...
	11-09-2024	-----
7	12-09-2024	-----
	13-09-2024	Common roots and multiple roots
	14-09-2024	-----
	15-09-2024	<b>S. U. N. D. A. Y.</b>
	16-09-2024	Contd...
	17-09-2024	Transformation of equations
	18-09-2024	-----
8	19-09-2024	-----
	20-09-2024	Nature of the roots of an equation
	21-09-2024	-----
	22-09-2024	<b>S. U. N. D. A. Y.</b>
	23-09-2024	<b>H.O.L.I. D. A. Y.</b>
	24-09-2024	Contd..
	25-09-2024	Descarte's rule of signs
9	26-09-2024	-----
	27-09-2024	Solution of cubic equation
	28-09-2024	-----
	29-09-2024	<b>S. U. N. D. A. Y.</b>
	30-09-2024	Biquadratic equations and their solutions
	1-10-2024	Continue the same topic

	2-10-2024	<b>HOLIDAY</b>
10	3-10-2024	-----
	4-10-2024	<b>HOLIDAY</b>
	5-10-2024	-----
	6-10-2024	<b>S. U. N. D. A. Y.</b>
	7-10-2024	Doubts related to the topic
	8-10-2024	Matrix and its types: Definitions and basic concepts
	9-10-2024	-----
11	10-10-2024	-----
	11-10-2024	Examples based on symmetric and skew-symmetric matrix
	12-10-2024	<b>HOLIDAY</b>
	13-10-2024	<b>S. U. N. D. A. Y.</b>
	14-10-2024	Examples based on Hermitian and Skew-Hermitian matrix
	15-10-2024	Examples based on Unitary and Orthogonal matrix
	16-10-2024	-----
12	17-10-2024	<b>HOLIDAY</b>
	18-10-2024	Examples based on Idempotent, Involuntary and Nilpotent matrix
	19-10-2024	-----
	20-10-2024	<b>S. U. N. D. A. Y.</b>
	21-10-2024	Rank of a matrix, Row rank and Column rank of a matrix
	22-10-2024	Contd...
	23-10-2024	-----
13	24-10-2024	-----
	25-10-2024	Doubts related to the topic

	26-10-2024	-----
	27-10-2024	<b>S. U. N. D. A. Y.</b>
	28-10-2024	<b>DIWALI BREAK</b>
	29-10-2024	<b>DIWALI BREAK</b>
	30-10-2024	<b>DIWALI BREAK</b>
14	31-10-2024	<b>DIWALI BREAK</b>
	1-11-2024	<b>DIWALI BREAK</b>
	2-11-2024	<b>DIWALI BREAK</b>
	3-11-2024	<b>S. U. N. D. A. Y.</b>
	4-11-2024	Elementary operations on matrices, Inverse of a matrix, Normal and PAQ form
	5-11-2024	Linearly dependent and independent of rows and columns of matrix
	6-11-2024	-----
15	7-11-2024	-----
	8-11-2024	Applications of matrices of homogeneous and non-homogeneous equations
	9-11-2024	-----
	10-11-2024	<b>ZONAL YOUTH FESTIVAL</b>
	11-11-2024	<b>ZONAL YOUTH FESTIVAL</b>
	12-11-2024	<b>ZONAL YOUTH FESTIVAL</b>
	13-11-2024	<b>HOLIDAY</b>
16	14-11-2024	-----
	15-11-2024	<b>H.O.L.I.D.A.Y.</b>
	16-11-2024	-----
	17-11-2024	<b>S. U. N. D. A. Y.</b>
	18-11-2024	Theorems on consistency of a system of linear equations

	19-11-2024	Continue the same topic
	20-11-2024	-----
17	21-11-2024	-----
	22-11-2024	Doubts related to the topic
	23-11-2024	-----
	24-11-2024	<b>S. U. N. D. A. Y.</b>
	25-11-2024	Eigen values, Eigen vectors and characteristics equation of a matrix
	26-11-2024	Minimal polynomial of a matrix
	27-11-2024	-----
18	28-11-2024	-----
	29-11-2024	Cayley-Hamilton theorem and its uses
	30-11-2024	-----
	1-12-2024	<b>S. U. N. D. A. Y.</b>
	2-12-2024	Diagonalization of a matrix
	3-12-2024	Doubts related to the topic
	4-12-2024	-----
	5-12-2024	-----

Signature